

PROCEEDINGS
OF THE
ELEVENTH CONVENTION OF AMERICAN INSTRUCTORS
OF
THE DEAF.

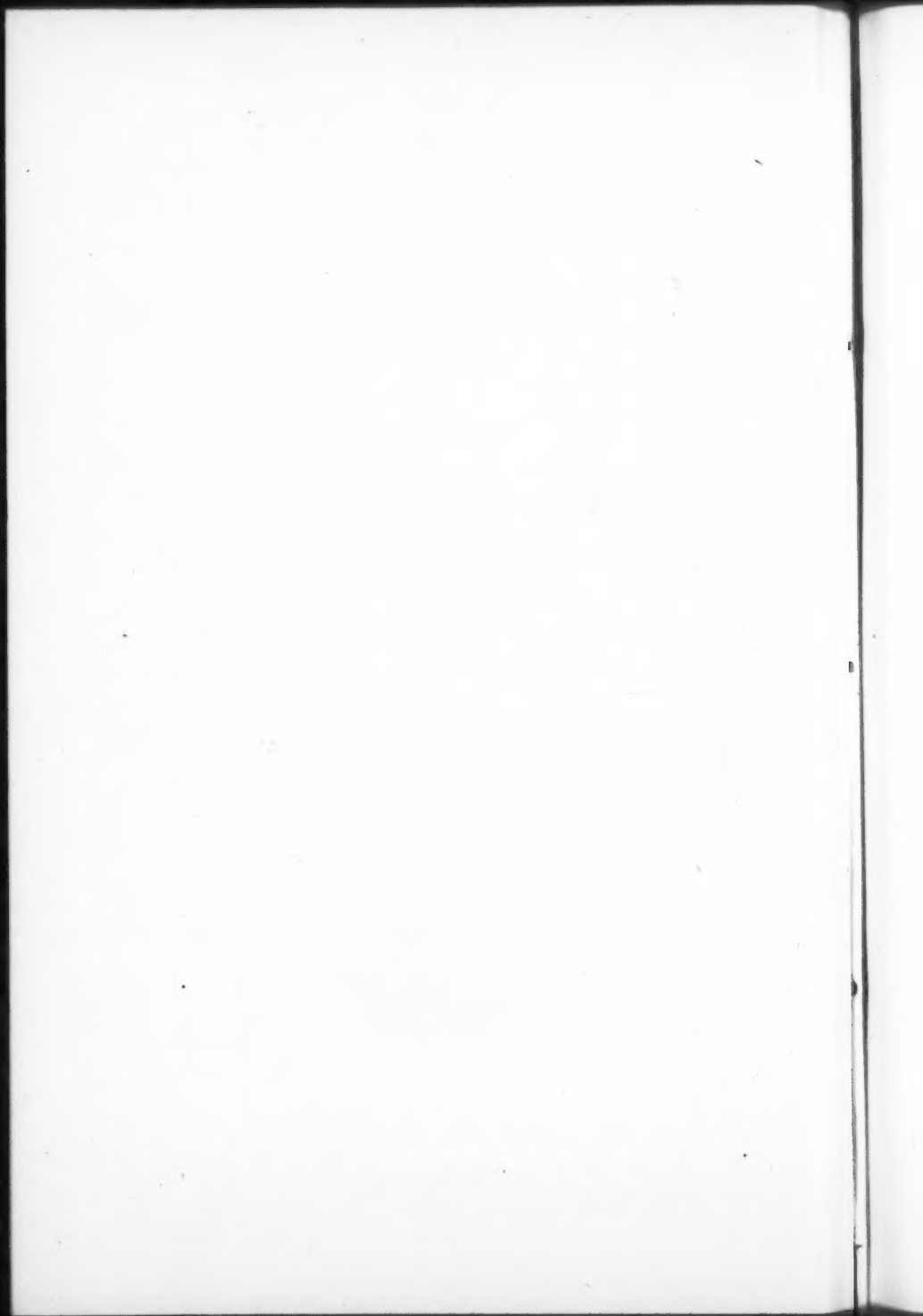
HELD AT BERKELEY, CALIFORNIA,

JULY 15-22, 1886.



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PROCEEDINGS.

FIRST DAY.

THURSDAY, July 15, 1886.

The Eleventh National Convention of American Instructors of the Deaf and Dumb convened at Berkeley, California, July 15, 1886, at ten o'clock A. M., in the chapel of the California Institution.

President E. M. GALLAUDET, Chairman of the Standing Executive Committee, called the meeting to order, and said:

Ladies and gentlemen, it becomes my duty as Chairman of the Standing Executive Committee of the Convention of American Instructors of Deaf Mutes to announce that the time mentioned in the call for the eleventh convention at which the convention should assemble has arrived. It is with no little pleasure that I perform this duty of calling together this eleventh convention of the American Instructors of the Deaf and Dumb; and before reading portions of the call for this convention, I will, as has been suggested to me by some friends to be desirable to do, make a brief statement as to what this convention is and what it has been in the past; what we have in the history of the past to give us what may be called an historical consciousness that we may begin our work here with a thought of what has gone before us, and what it is in the past that we now represent and carry forward into the future.

The first convention of American Instructors of the Deaf was held at the Institution for Deaf Mutes, in the City of New York, in the year 1850. There were at that institution six schools only represented, and but thirty-five delegates present.

The second convention was held at Hartford, Connecticut, the seat of the first Institution for Deaf Mutes, in the year following, in 1851, and there were present at that meeting thirty-three delegates, representing only three schools.

The third convention was held at the institution in Columbus, Ohio, in 1853, and there were at that convention six schools represented by thirty-five teachers.

The fourth convention was held at Staunton, Virginia, in the summer of 1856, at the Institution for the Deaf in the State of Virginia, and there were present at that meeting only thirty-one instructors, representing nine institutions.

The fifth convention was held at Jacksonville, Illinois, in 1858, at which but forty-four delegates represented ten schools.

After the fifth convention, a period of ten years passed before any other convention was held. There were circumstances during that period which led to an interruption of the meetings of the convention. But in 1868 a call was issued from the college at Washington inviting the heads of the institutions to assemble therein with a view

of resuming these conventions. At that gathering there were twenty-six delegates present, mostly heads of institutions, representing fourteen schools; the meetings of the convention being thus revived at what was called the sixth convention.

The seventh was held at Indianapolis, in 1870, twenty-four schools being represented by one hundred delegates.

The eighth was held at Belleville, Province of Ontario, in 1874, twenty-seven schools being represented by one hundred and forty-seven delegates.

The ninth was held at Columbus, Ohio, in 1878, thirty-four schools being represented by one hundred and forty-seven delegates.

The tenth and last convention was held at Jacksonville, Ill., in 1882, thirty-two schools being represented by one hundred and eighty-four delegates. That convention was regarded as the most successful as it was the most numerously attended of any convention up to that time. It was a notable gathering, one that we all remember; and I recollect as one present upon that occasion that we questioned whether we had not reached the summit of our greatness as a Convention of American Instructors of the Deaf and Dumb. At that time there was talk of an attempt to hold a convention in California. Many said it would be exceedingly pleasant to go, but it was doubted whether enough could be induced to go to make it worth while to hold a convention in this State. The subject was under consideration somewhat at that time, and about two years later quite formally, but the matter was postponed; and last winter, when the Executive Committee had before it the very courteous and warm invitation of the officers of this institution to meet here at this time, there was even then some doubt expressed as to whether it was expedient to attempt to hold the convention so far away from the Eastern States as the Pacific Coast would be. But the committee decided, without consultation outside of its own body, to accept this kind and cordial invitation, and to hold the convention here. Measures were then taken, as the most of you are aware, by Mr. Wilkinson, with the coöperation and assistance of Dr. Gillett, in the matter of transportation; the enthusiasm grew, the number who were to come grew, and I hardly need to tell you now that the Eleventh Convention of American Instructors of the Deaf, meeting here in Berkeley, California, represents a larger number of schools than has ever been represented in any convention. [Applause.] Forty-one schools are known to be represented in this convention, and probably two hundred and twenty-five to two hundred and thirty delegates. [Applause.] So our western friends, if I may be allowed to speak as from the East, will see that neither the Rocky Mountains, nor the barren American desert, nor the Sierra Nevada, nor the matter of expense, nor anything else, has stood in the way of our earnest desire and purpose to be present at the meeting of this convention. [Applause.]

I will read some extracts from the call for the convention, as it is my duty to do:

NATIONAL DEAF MUTE COLLEGE, KENDALL GREEN, NEAR WASHINGTON, D. C.,
March 22, 1886. }

At the Tenth Convention of American Instructors of the Deaf and Dumb, held at Jacksonville, Illinois, August 26-30, 1882, the following resolution was adopted:

Resolved, That all invitations for the next convention be referred to the standing committee, who are hereby authorized to take all necessary action in the premises.

At a meeting of the committee, held in New York December 10, 1885, a communication was presented from the Board of Directors of the California Institution for the Education

of the Deaf and Dumb and the Blind, through Mr. Warring Wilkinson, Principal, inviting the convention to meet in Berkeley, at their institution, during the summer of 1886.

An invitation was also presented from the Board of Trustees of the Iowa Institution for the Education of the Deaf and Dumb, through Mr. Henry C. Hammond, Superintendent, offering the hospitalities of their institution to the convention.

On taking the sense of the committee, a disposition to accept the invitation to California proved to be unanimous. In consideration of the several invitations to California which had come before the committee in former years, and which they had felt compelled to decline, it was with especial satisfaction the committee recognized the fact that nothing now stood in the way of accepting the proffer of hospitality so generously renewed, and of which very many members of the profession had long desired to avail themselves.

Notice is accordingly hereby given that the eleventh convention will be called to order in the California Institution on Thursday, the fifteenth day of July, 1886.

DR. GALLAUDET then suggested that the Hon. Erastus Brooks, of New York, well and favorably known, and highly honored and of great prominence in that State as the founder and conductor of the "New York Express," the President of the Board of Directors of the New York State Institution, be invited to take the chair as the temporary Chairman of the convention. This suggestion in the form of a motion was put to the convention and carried; and the Hon. Erastus Brooks was escorted to the chair amidst great applause.

MR. BROOKS: Ladies and Gentlemen, Principals, Teachers, Superintendents, and friends of the deaf and dumb in these United States of America, I count it a very high honor to be permitted to preside temporarily over your deliberations to-day. My interest in the instruction of the deaf and dumb extends back to fully thirty years ago, when as a citizen of the State of New York, in the Senate of that State, it was my privilege, upon the earliest petition of the friends of the deaf and dumb in the State, to do something for the relief of an institution which at that time was covered, I may say, all over with debt. The debt has gone, the institution is free from obligations, and it opens wide its arms to receive all who need its instruction. And from the one institution in the State of New York has grown seven other institutions, until, from Lake Erie to the Atlantic, almost every home has a school for the deaf brought to its own fireside. Whenever I have an opportunity, I take great pleasure in doing honor to the States of this Union which show a just appreciation of those who need the forms of instruction which are extended here. We open wide our gates to all those who are blessed with speech and with hearing; and in the providence of God, and in the natural humanities of men, it is but a public duty, as it is a great privilege, to extend to the children of the land, to the deaf and dumb, privileges in common with those who are blest with speech and hearing. [Applause.]

Our friend who called this meeting to order, has alluded by numbers to the growth of the institutions of the country. Now, I do not like to consider myself a very old man, yet I am older in years than any institution in the United States of America; showing how great must have been the neglect in the early periods of the history of the country of a proper appreciation of the interests of this class of unfortunate people.

The first institution was established in 1817; the second, of which I have the honor to be President, was established but a year later. And from that time to the present year, as you have witnessed, there have been established over forty institutions in the country; and there are, as near as I can find out, over thirty-three thousand people in this country who, in one form or another, either as citizens or as pupils, are interested in this class of instruction. And in a country

like this it is destiny, or to use a more proper word, it is in the providence of God that what has been and is will grow and enlarge until every child afflicted with the absence of these blessings which some of us enjoy, shall have, free as the water that flows or the sun that shines, the blessings of this kind of instruction. [Applause.]

It is now my privilege for the first time to be in this State of California. I can say, as one advanced in years, it was a journey that tires the mind and wearies the body. But as good news that comes from a far country, as cold water is to the thirsty soul, so is our welcome to our place of rest here. [Applause.] I have seen manifested as I never anticipated before, the growth of this great nation. The dozen of States that some of us have passed through, the representation here to-day of every institution in the country excepting three, shows the power, the concentration and purpose of will, and general interest in an occasion like the present. Many of us have come here from a natural curiosity to see the Pacific Ocean, and this State, which has so long been prosperous upon it. Our eyes have been greeted with foliage, with flowers, with a bloom and beauty that certainly I never saw before. And I am happy to know and believe that, in the growth of this nation, it is not place, nor States, nor long distances, whether in the State of Maine, where I was born, or in the State of New York, where I lived for fifty years and more, or here, but that we are all of one country, one constitution, one destiny, and one humanity. [Applause.]

No geographical bounds can hereafter separate the American people. [Applause.] And it is pleasant to see and know, and most of all to feel, that, whatever may be our conditions in life, under the flag which floats over our heads to-day the government which the people represent, and of which we are a part, finds faith, prosperity, and happiness in the perpetuation of this unity. [Applause.]

I thank you, my friends, very cordially for the honor of presiding here temporarily to-day, and I wish you godspeed in the deliberations of the days to come. I await the further order of this convention. [Applause.]

On motion of DR. I. L. PEET, of New York, which was put and carried, it was declared that the proceedings of this body be governed by the ordinary rules of parliamentary practice.

MR. D. L. ELMENDORF moved that a committee of three on credentials and the enrollment of members be appointed. The motion was put and carried unanimously, and the following members were appointed by the Chair: D. C. Elmendorf, of New York; Willis Hubbard, of Michigan, and W. A. Caldwell, of Pennsylvania.

On motion of MR. G. O. FAY the Chairman recommended a committee of five for the consideration of the convention as permanent officers, which recommendation was duly seconded and carried unanimously: G. O. Fay, of Connecticut; W. O. Connor, of Georgia; W. S. Marshall, of Missouri; G. W. Veditz, of Maryland; Sister Mary Anne, of Buffalo, New York—which committee retired for deliberation.

Letters of regret from the following absentees were then read by Mr. Wilkinson:

WISCONSIN SCHOOL FOR THE DEAF, }
DE LAVAN, WISCONSIN, July 5, 1886. }

Superintendent WARRING WILKINSON, Berkeley, California, Institution for Deaf, Dumb, and Blind:

DEAR SIR: It is the occasion of sincere and lasting regret on my part that I am unable to accept the generous hospitality of your institution and participate in the profit and pleasure of the convention.

My thoughts and best wishes attend the deliberations of the convention, and I have no doubt that much practical truth and knowledge will be elicited. I trust that the subject of articulation as a branch of our institution work will receive its share of attention, and have no doubt that the oral branch of our institution work is deserving of more careful attention than it usually receives.

With fraternal greetings to all, I have the honor to remain,

Sincerely yours,

JOHN W. SWILER,
Delavan, Wis.

ALABAMA INSTITUTION DEAF, DUMB, AND BLIND, }
TALLADEGA, ALABAMA, July 4, 1886. }

Professor W. WILKINSON, Principal California Institution Deaf, Dumb, and Blind:

MY DEAR SIR: I regret exceedingly that I am not able to be with you at the convocation. No little matter would keep me away. Until two days ago I thought our institution would be represented by at least two of our teachers, but for some reason I understand they have concluded not to go. I regret it. Please convey to the ladies and gentlemen who are so fortunate as to be with you my warmest and kindest regards, and best wishes that the occasion may be most enjoyable, as I know it will be profitable. For yourself and family accept the assurance of my high esteem.

Very truly, your obedient servant,

J. H. JOHNSON,
Principal.

BOULDER, COLORADO, May 3, 1886.

Mr. WILKINSON:

DEAR SIR: Your very kind letter reached here the twenty-eighth ultimo, and I would have replied at once had I not daily expected advice from my physician which would probably settle the matter of my going to California. His letter came this morning, and I find he is not willing to assume the responsibility of my going. I do not like to take the matter into my own hands, as I am unwilling to do anything that might hinder my recovery, and so, perhaps, prevent my returning to my work in the autumn.

Until recently, I have been very hopeful that Miss C. A. Yale, our Associate Principal, would attend the convention, but it is now quite settled that she cannot.

I hear from the institution that Miss Sparrow, one of our teachers, and Miss Cowles, an attendant, are intending to go to California to join the convention. I will ask Miss Yale to write you whether they have friends with whom they will stay, or whether they will accept your kind hospitalities.

I regret very much that Miss Yale cannot go to represent our institution. I am very sorry not to meet our fellow laborers in council, and not to see your wonderful country, but it does not seem best that I should do so now.

Accept many thanks for your very cordial invitation, and believe me,

Most truly yours,

H. B. ROGERS.

INSTITUTION FOR THE INSTRUCTION OF THE BLIND, }
NORTH BOUNDARY AVENUE, BALTIMORE, May 12, 1886. }

My Dear WILKINSON:

I have postponed writing to you this long, hoping that circumstances might possibly so shape themselves that I would be able to accept your kind invitation to visit the Pacific Coast this summer, but the longer I wait the worse they get, so I have at last decided, most reluctantly, to give up all hope of being one of the party who will enjoy your hospitality. The educators of the blind will meet in New York early in July, and, of course, I am expected to be present. In addition, we shall have to build for our colored school, and I shall have to make some extensive repairs at home which will require my supervision. I cannot tell you how much I regret my inability to journey westward this summer. I feel that I may never again have such an opportunity to visit you, unless you should some day decide to invite us blind folks to hold a convention at your institution. I had hoped to see you in New York this summer. I believe you have attended but two of our conventions, Boston and Philadelphia. Of course when I cherished the hope of having you with us, I did not know that you were going to have a convention at your institution.

Regretting that I shall not be one of your fortunate guests, and with respects to Mrs. Wilkinson, I am,

Very truly yours,

F. D. MORRISON.

INSTITUTION FOR THE DEAF AND DUMB, }
JACKSON, MISSISSIPPI, June 28, 1886. }

WARRING WILKINSON, Esq., Berkeley, California:

DEAR SIR: Yours of May twentieth is to hand. I am sorry to say I cannot attend the convention. I have been looking forward to this pleasure for years, but I find I will have

to forego it, and am trying to take it like a philosopher. I expected when the convention was called, to go, but I find it out of my power now. None of our teachers can go, and we will have to be without a representative. I would be glad to know you personally, and visit your institution, but must reserve those pleasures for some future time.

Hoping you may have a pleasant and profitable convention, I am,

Yours truly,

J. R. DOBYNS.

INSTITUTION FOR THE IMPROVED INSTRUCTION OF DEAF MUTES, }
LEXINGTON AVENUE, BETWEEN SIXTY-SEVENTH AND SIXTY-EIGHTH STREETS, }
NEW YORK, April 26, 1886.

Mr. W. WILKINSON, *Principal, etc.:*

DEAR SIR: Yours of the eighth instant is received. I have sent you all our reports that you asked for, except the second, which is out of print.

In answer to your question, I desire to say that this institution will not be represented at the coming convention. But I hope and wish that the gathering may prove agreeable to those who will attend it, and that it may result in a great deal of good to our cause.

Yours truly,

D. GREENBERGER.

NEW MEXICO SCHOOL FOR THE DEAF AND DUMB, }
SANTA FE, NEW MEXICO, July 8, 1886. }

Professor W. WILKINSON, *Berkeley, California:*

DEAR SIR: Owing to present circumstances, I regret my inability to come and attend your coming convention. With best wishes for the success of the convention, I am,

Yours, very respectfully,

LARS M. LARSON, *Principal.*

ASYLUM FOR THE DEAF AND DUMB, }
VICTORIA ROAD, MARGATE, KENT, June 3, 1886. }

Dr. GILLET:

DEAR SIR: Allow me to thank you most heartily for your very kind invitation to me to take part in the forthcoming convention in California, and to express my extreme regret that circumstances do not allow me to accept it.

As a teacher, nothing would give me greater pleasure than to witness, for myself, the great things that are done among you for the deaf mute, and to meet and take counsel with those who so enthusiastically and successfully work for him. In addition I very much desire to see for myself something of your great country, which none of us here look upon as a foreign one. We regard you rather with the feeling with which a parent looks upon a grown up child, gone forth on an assured and splendid career, whom he has taught many things, and who in many others has improved upon his teaching. And in the present case, in our own particular work, you have gone, as I believe, far ahead of us; but the parent is not yet decrepit, even if she be old, and may yet run side by side with you in the glorious work of ameliorating the immense disadvantages which arise from deafness. In another particular, too, according to your kind letter, you have far exceeded the example we set you, for while we are content with one Queen—and a right good one she is—"everybody," you say, "is a king or a queen over here." What a *monarchy* yours must be! Thanks very much for the royal republican welcome you offer. I wish I could accept it.

The programme of your journey, too, makes one dissatisfied and disappointed not to be able to share in so splendid a trip.

I can only add my earnest hope that the convention may be a highly successful one, fraught with success in the elucidation of the many problems our common work presents, and a pleasant and happy holiday for all those who participate in it.

Very truly yours,

RICHARD ELLIOTT.

GUION MAIL STEAMER ALASKA, June 27, 1886.

My Dear Mr. WILKINSON:

I am very sorry not to be with you all in convention assembled, but affairs of a personal interest seemed rather to have called me this way. We are now approaching Queens-town, and with my best wishes for a successful convention, and kind remembrances to all friends, I am,

Fraternally yours,

E. B. NELSON,
Principal Central New York Institute for Deaf Mutes, Rome, N. Y.

SOUTH CAROLINA INSTITUTION FOR THE EDUCATION
OF THE DEAF AND DUMB AND THE BLIND,
CEDAR SPRING, SOUTH CAROLINA, July 7, 1886. }

Mr. W. WILKINSON, *Berkeley, California:*

MY DEAR SIR: It has been a great disappointment to me to be obliged to give up my long and fondly anticipated trip to your great State, and not to be able to participate in the work of the convention. Our Mr. Rogers will be with you and will represent our State and school.

Please present my love to the members of the convention, with the assurance that I shall be with them continually in thought and desire for harmony and success.

Yours, very truly,

N. F. WALKER.

WEST VIRGINIA INSTITUTION FOR DEAF MUTES AND THE BLIND,
ROMNEY, WEST VIRGINIA, June 24, 1886. }

Dr. PHILIP G. GILLETT:

MY DEAR SIR: I find at the eleventh hour, to my deep regret, that I shall not be permitted to join the grand expedition to California, so skillfully planned and arranged by you, at the cost of so great labor and painstaking on your part, on account of recent affliction in our family, at the same time doubting whether I could stand the trip, if free to go. I shall always regret the loss of this opportunity, not only of not journeying to the land of the "setting sun," in company with old associates in our life's work, and others whom I desire to know, but above all, of not being present to participate in the proceedings of so important a convention.

Remember me most kindly to Mr. Wilkinson, and express these regrets to him and all of our profession.

Very truly yours,

JNO. C. COVELL.

NATIONAL COLLEGE FOR THE DEAF,
WASHINGTON, D. C., July 8, 1886. }

Mr. WARRING WILKINSON, *Principal California Institute:*

MY DEAR SIR: Will you please say for me to the transcontinental convention, assembled within your hospitable walls, that I regret deeply my inability to be present at an assemblage which, by virtue of numbers, intelligence, experience, and enthusiasm, gives promise of great helpfulness to its members, and of increased efficiency to every department of the arduous and ever growing, yet, upon the whole, delightful work to which so many have consecrated their lives.

While congratulating those present upon these "red letter" days, I feel that nothing short of a personal apology, from stay-at-homes, like myself, is due to Dr. Gillett, who has made mole hills of mountains. And now will you not whisper in our magician's ear dreams of, say, London or Paris as the seat of the next convention!

With personal regards for yourself, I remain,

Yours, truly,

J. C. GORDON.

MR. JOB WILLIAMS, of Hartford, also presented a verbal message from W. W. Turner, of Hartford, Connecticut, eighty-six years of age.

THE CHAIRMAN (Mr. Brooks): Ladies and gentlemen, before the report as to permanent organization is received, as it is not yet ready, I will make a single remark, to show the growth of the country in some respects.

It was just one year ago this day, July 15, 1885, that I had the pleasure of presiding over a convention held at Niagara Falls to commemorate an event in which every citizen of the United States has an interest—that from July, 1885, and forever thereafter, the Falls of Niagara are free to the people of the United States, by the payment of a million and a half of dollars for the purchase of that privilege from those who owned the territory and the water front there. And I am reminded of that event by the suggestion which has been made in the letter from Mr. Elliott, that hereafter, in his own good time, and with just consideration for the taste and desires of those interested in the deaf and dumb in the country at large, some convention be held upon the other side of the Atlantic, where all who are interested in the deaf and dumb in the United States may meet their

friends abroad. Whether or not that event will ever happen, I know not; but the letter which has just been read from our friend in London, manifesting an interest in this work and in this convention, shows that, though we may be as wide as the poles apart, we are really of one heart, one mind, and one purpose, in the desire to secure the greatest good of the greatest number of people all over the earth. [Applause.]

MR. I. N. TATE, of Missouri, stated that W. D. Kerr, of that State, seventy-eight years old, intended until a few days before starting to have been here, but was unable to attend, which accounted for his not sending a letter of declination.

The Chairman of the Committee on Nominations then read the following report of that committee, recommending the following permanent officers:

President, Philip L. Gillett, LL.D., of Illinois. Vice-Presidents—Professor Samuel Porter, of Washington, D. C.; Dr. W. H. Latham, of Indiana; J. A. Gillespie, of Nebraska; D. C. Dudley, of Colorado; T. L. Moses, of Tennessee; R. Mathison, of Ontario; Miss Anna M. Black, of Rhode Island. Secretaries—H. C. Hammond, of Iowa; Theophilus D'Estrella, of California; and A. S. Clark, of Connecticut.

The report was unanimously adopted.

The President-elect, PHILIP L. GILLETT, was then conducted to the chair amid great applause, and addressed the convention as follows:

LADIES AND GENTLEMEN, FELLOW CITIZENS, BRETHREN, SISTERS, AND FATHERS: It is with no slight emotion that I thank you for the great honor that you confer upon me in calling me to this position. And I trust you will understand that I say "please accept my thanks," not because it is customary, but because I regard this as the highest honor to which I could aspire, an honor to which I have not dared to aspire. I have felt it a sufficient honor to have tried for a few days or weeks past to contribute to the comfort and the pleasure of the members of the convention, and to serve them as best I might be able in a very humble capacity. [Applause.]

We are here, my friends, for work. While to many it may have appeared that we were upon a pleasure excursion, yet we are engaged in a great and a grand work. We are here as workers in a great cause; to inquire and to learn how we may work more effectively than we have been able to do thus far. We are here a cosmopolitan gathering, so to speak; not only from this country of ours, but from our neighbors upon the north, in the Dominion of Canada, and I think that we shall in a few days clasp the hand of one who will come to us from across the Pacific. We are here from the Blue Ridge, the Alleghanies, the Rockies, and the Sierras; we are here from the St. Lawrence, the St. John on the northeast and the St. John in the southeast; from the Rio Grande in the southwest, and from "where rolls the Oregon, and hears no sound save its own dashings." And as we are thus gathered from all over this country with reference to one purpose and one aim, so we are here wedded to no particular method, ready to grasp and avail ourselves of anything that is new, and ready to surrender anything that is old, when a better is presented. [Applause.] But never to give up that which is good until we get the better. [Applause.]

We are living and dwelling in a grand, an awful time; "In an age

on ages telling, to be living is sublime." In such an age are we living, and in such work are we engaged.

The Chairman of the committee has referred to the growth of this convention. That is something in which he may take very great pride; wherein we may rejoice. But I rejoice far more in the fact that this growth of the convention is but an exponent of the great moral humanitarian sentiment that exists and pervades this land of ours. [Applause.]

We are here to equip ourselves better for the work that lies before us, and that has been committed to us. We all, in a measure, sustain the relation of trustees; for certain purposes we are the trustees of the people of this great continent. And while the pecuniary or money view is not the highest in which to regard questions of this kind; yet very often the pecuniary and the money view is the sentiment and principle that animates the best of the people when they pour out their money by millions. More than ten millions of the money of the people of this country are represented here this morning by the delegates, members of this convention. It is a great trust that has been committed to us by this grand, this noble, and this humanitarian people, and I think that it is in recognition of this trust, and under a sense of duty that we are assembled here this morning upon the western border of our land of flowers, of beauty, and of brightness. We have enjoyed our journeying, and threading our ways through the mountains and across deserts; and we have landed in this paradise. We have found already in a good measure that for which we came West. We had scarcely set our feet upon this beautiful State; had scarcely looked upon these structures that stand here in their stability and beauty, before every one felt that we had learned a lesson that we might well carry back to our homes, to our people, and to our pupils. [Applause.]

But I must not consume time in talking longer. I would gladly give you many promises as Chairman of this convention; but you will certainly be better satisfied with performance; and while I will try to do the best I can, I shall be under the necessity of asking your charity and your assistance in this responsible position. The convention is now ready for business. [Applause.]

The following committee was then appointed on Order of Business: A. L. E. Crouter, of Pennsylvania; C. W. Ely, of Maryland; S. T. Walker, of Kansas; J. B. Hotchkiss, of Washington, D. C.; Miss J. A. Shrom, of West Pennsylvania.

MR. ERASTUS BROOKS made a motion that the time occupied in the reading of any one paper shall not exceed fifteen minutes.

MR. GALLAUDET moved to amend so as to have the matter referred to the business committee for their consideration.

MR. BROOKS also made it part of his motion that the discussion of papers be limited to five minutes for each member who desires to speak.

MR. G. O. FAY desired to amend further by making it ten minutes.

The second amendment being put to vote was adopted, limiting the discussion to ten minutes. The motion to refer to the business committee was carried.

The Chair then nominated as interpreters for the deaf mutes Rev. Thos. Gallaudet, F. W. Booth, and W. K. Argo, and upon motion they were unanimously chosen.

MR. WILKINSON then extended to the convention an invitation to take an excursion around the bay on Saturday next.

DR. PEET, of New York, moved that Mr. Wilkinson be made a committee of invitation to invite to the sessions of the convention, ladies and gentlemen who have taken special interest therein.

This motion was seconded and carried unanimously, and the appointment was made.

On motion of MR. JOB WILLIAMS the following Committee on Necrology was appointed by the Chair to prepare obituaries: Job Williams, J. A. Kennedy, Miss Mary R. Harris, E. L. Chapin, and E. A. Fay. Mr. Wilkinson was given power to offer honorary memberships to prominent men of the State.

The following paper, entitled "Is There a Better Way?" was then read by D. C. DUDLEY, of Colorado:

IS THERE A BETTER WAY?

To every thoughtful Superintendent of an institution for deaf mutes there has doubtless occurred the question whether or not even our best regulated schools are doing all for those committed to their care that an enlightened public has a right to demand; whether, in short, we are rendering a *quid pro quo* to our respective States for the burden they assume in supporting such institutions, and if not, whether the failure is the result of the inherent difficulties of the task we have set ourselves, or because we are not following the very best road to success.

The consideration of the subject is forced upon us by the everywhere apparent fact that many deaf mutes, even after every advantage has been afforded them, continue to be helpless charges to their friends through life. They seem to know how to do very little, and to be indisposed to do even that. They run about from place to place seeking, it would seem, a soft job, or that El Dorado where money grows upon trees, and where hard labor is unknown. They are entirely destitute of that manly independence which would prompt them to indignantly reject any favor offered them because of their deafness, and, in fact, count themselves in luck when a sympathetic public lends them unmerited assistance on account of their affliction.

Now, while it is a matter of thankfulness that this is a picture of only a minority of the class, still that minority is so considerable a part of the whole as to challenge our attention and make us desire its reduction.

What, probably, is the source of this disposition to idleness and disregard of obligation? I do not hesitate to say that it is largely the result of the comforts and conveniences of life in well ordered institutions.

Let us follow one of our pupils through the day and see if we cannot get a clue to the matter. Arising at the prescribed hour he finds that the vigilant fireman has been up hours before him and warmed his dormitory so that he may dress leisurely and comfortably. He descends to the washroom, where hot and cold water are to be had in marble bowls for a slight pressure on a faucet. His ablutions finished, he hies him into a comfortable hall lighted by gas or electricity, where he joins his boon companions for a half hour's paradise of small talk. Breakfast is then announced, and, being ushered into a well appointed room, he finds that his servants—the State, the Super-

intendent, the steward, Matron, and cook—have furnished the means and done all the brain work and physical labor necessary to secure him a good substantial meal. Not having had to expend any of *his* energy to provide this food, he vents what he has upon criticising the staleness of the bread, the weakness of the coffee, and the strength of the butter, until he works himself and his companions up into the belief that he is doing the authorities a great favor by partaking of what is set before him.

After breakfast a little play, and then the labors of the day begin—labors of the officers and teachers, but not of the pupil. First of all, he repairs to the chapel, where the Superintendent delights him with a lecture which has cost an hour or so of brain work to prepare, and which he accepts as a matter of course. The teacher next takes the young gentleman in charge. He furnishes him with pads, pencils, books, slate, sponge, etc., and if he tears one, throws away another, and loses a third, a new article is on hand to take its place. The State is rich, you know, so there is no necessity for economy. The teacher, good, honest soul, puzzles his or her brain, and is often in an agony of anxiety lest the pupil should not learn. He, himself, however, wonders why any one should take the matter so much to heart. If the teacher can work up his own enthusiasm to a high pitch, and present his instruction in an attractive manner, and if any of it gets in among his mental furniture and sticks, well and good; but if it doesn't, what's the difference? The teacher has nothing to do but to teach it over again. He is paid, in fact, for this very thing, and therefore has no cause for complaint.

School over, a nice dinner, the result of somebody else's planning, awaits him, smoking hot, to afford consolation after the laborious duties of the morning. He sometimes gets merry when the meal is especially good, and wisely argues with his fellows that it is better to be a deaf mute than a poor speaking person.

After dinner he repairs to the shop and remains a couple of hours, but do not suppose he does so to work. Not much! A large share of the time he is talking, and another large share is devoted to watching the foreman take his (the pupil's) job over the hard parts. The remainder of the time he probably labors.

After work hours, if the Superintendent has had him a swing put up, or a croquet or baseball ground made, he plays; otherwise he talks till supper. This meal comes on in due time without any effort on his part, and he enjoys it without considering for a moment that it has cost either time or money.

The study hour is next on the tapis. Here, too, he has some one to wait upon him. A supervisor or teacher is on hand to lift him over all hard places, and give him the meaning, in signs, of all hard words, so that he may be spared the labor of consulting the dictionary.

And now the hour for retiring has arrived, and an inviting bed, spread with immaculate linen, washed by some one else, woos him to slumber and recuperation for the arduous toils of another day.

This is no fancy sketch, but one that appeals to your own experience. What wonder then that eight or ten years of such training leaves many deaf mutes helpless and dependent, unable to earn a living, and angry with the world because it exacts that they shall?

Industry is a matter of opportunity and development. It does not come naturally, but must be cultivated. It therefore devolves upon

us to devise ways and means to make our institutions training places for the real battle of life.

Steam heating and water pipes and laundry machinery cannot be dispensed with, and at the same time the efficiency of our schools preserved; but, a minimum of help being employed, our pupils may be required to wait largely upon themselves, to eat their bread in the sweat of their brow. The study should be, not how to make it easy for them, but how to make it difficult, and to give them, at least, a slight foretaste of what awaits them when they go out from our fostering care, into a cold, selfish world, to win their own bread.

Let much importance be attached to trades. Sometimes I have thought that all our institutions should be organized as industrial schools, with an incidental educational branch, rather than, as at present, with mental training absorbing the best of our energies and attention, while manual training is, so to speak, almost ignored. I am not unmindful of what has been done in this direction; of the comparatively great strides taken in the last ten years; still I believe that much remains for the future. I am convinced that an equal division of the time between manual and mental work would yield as good results educationally as are now attained, and would diminish materially the number of deaf mute peddlers, tramps, and cheats that are now such a disgrace to the class.

A single man laboring but a day may throw up a shell of a cabin, while it may require the labor of a score for as many months to erect a substantial building, still the latter is more economical in the end, and if we purpose making good, solid, substantial citizens of our pupils, and if we can make it clear to the public that that is the end in view, the economy of such a course will be recognized, and a sufficiency of both time and means will be allowed.

I devoutly hope that the time is not far distant when, being pressed and urged by Superintendents and Boards of Trustees, the law makers of every State will have it dawn upon them that taking away the faculty of hearing from a child does not necessarily make him so bright that he can master in six or eight years what is required of a hearing child in fifteen, and that being so enlightened as to the necessities of the case they may put all your institutions on a par with that of Colorado, where, if necessary, we may receive the little four-year old child and continue its training until it stands upon the threshold of manhood or womanhood.

THE CHAIRMAN: The paper is now before the convention for discussion.

MR. F. D. CLARK, of Arkansas: Ladies and gentlemen, I have listened to the first part of Mr. Dudley's paper with a good deal of surprise. All of my manhood has been devoted to the teaching of the deaf and dumb. I have been familiar with a great many institutions, and I have never seen the picture that he has drawn here of an indolent, good-for-nothing deaf mute, as a class. There may be, in large institutions, one or two boys that will fill that picture. But take our institutions straight through—those of them that I have the pleasure of knowing—and it is not so. I am at present at the head of an institution in which I have been but for a year, and in which it was the aim of the former Principal to make it hard for the deaf and dumb—to make them work. When I went down there I found that the girls of the school went into the washhouse and did all of the washing for that large institution. There were only about twenty

girls who were large enough to do washing, and they did all of the Principal's washing, all of the boys' washing, and all the bedding and everything, and in that hot climate they ironed, and if they did not get through by Saturday noon, they were simply told that they could work until they did get through. If to make it hard for the deaf and dumb helps them, ought not those girls to have been brighter than the girls of other institutions where they have less work to do? But it was not so. They were worked until, when they went to school in the morning, they said they were too tired to study, and they did not try as they do in institutions where they are not worked so hard, and they were a long way below the average of those institutions with which I had been connected in New York and elsewhere, in which I have taught for a great many years. I am sure that this picture drawn by Mr. Dudley does not apply to those institutions, and, in fact, I do not think that in the New York institution of over four hundred pupils there is ever more than one pupil to which it will apply, and I am sure that it does not apply here. I am sure that it does not apply in Minnesota, and in all of the institutions with which I am familiar that there is nothing of the sort. And, so far from making the work harder for our children, I believe in teaching them, not for the work that they do, but to prepare them to do work in the future. If you take a boy and make him work until he is so tired that his mind and body are both exhausted, he may learn in a kind of mechanical rut, that he can follow, but he will never be able to make an independent American workman, mentally.

MR. HENRY WHITE, of Salt Lake City (a deaf mute): We deaf mutes are much obliged to Professor Dudley for the reading of the essay. But I wish to dissent from some of his conclusions. In the first place it is not *deaf mute* nature to want a "soft job"—it is *human* nature. [Applause.] I know that these institutions help deaf mutes greatly, improve their minds, and make them desire to get on. Every class of people has drones in its busy beehive. But we know that the deaf mutes who do these things are always shunned by the majority of their fellows. We all look upon them with contempt. [Applause.] We often advise them to settle down to some steady work. In some places deaf mutes are steady, and earn their living, and they get together and order the idlers out of the place. I think it is not the fault of the institutions, but that it is from other causes, that such is the case.

MR. WILKINSON: I think this discussion has gone beyond where my motion is of any use. This paper has something to do with manual instruction, and I was simply going to suggest that this whole subject of manual instruction, touched upon in this paper, would properly belong to a general discussion, if there is to be such. I thought after hearing this paper, I would take an hour or so before the convention adjourned to finish a paper that I have already upon the subject, and with the permission of the committee, read it to the convention, but I do not care to do it if we are to have two or three different opportunities for discussion upon this same subject. If the convention thinks proper to set apart some particular time or portion of the day or week for the discussion of this whole subject of manual instruction, how it should best be given, its importance, and so forth, I would be glad then to take some part in it, either by the reading of a paper or by its discussion.

THE CHAIRMAN: That matter will rest with the Committee on

Business. They will soon be able to notify us what papers they will have, so that all papers upon one subject may be brought before the convention and discussed at one time. We are now waiting for that committee to report.

MR. DUDLEY: I desire a moment to say a word or two in self defense. I want to set myself right before the deaf mutes of this convention. I made no attack upon Mr. Harry White, or any other deaf mute in this convention. I presume that these deaf mutes here are earning their own living, and the only deaf mutes to whom I refer are those whom I have designated as a very small minority of the great deaf mute class, none of whom are here to-day. [Hear! hear!] I say there are a few such deaf mutes—not as a class—and that the public judge deaf mutes by this small minority, and I wish, if possible, to reduce even this small minority.

DR. PEET, of New York: We have had two pictures—two extreme pictures—brought before us at our session, which, unfortunately, occasionally exist, where a child of hearing, as well as the deaf, in the kindness felt by those who look after them, has too much done for him, is petted too much, and does not learn habits of self reliance, and is not able, from his training, to take suitable care of himself.

We all know that a boy who starts out to earn his own living, who is a self-made man, who learns self denial in early childhood, makes the strongest and the grandest man. We all know that a girl who is taught to assist her mother, to render her all those little kindly aids which the circumstances of every household demand, becomes the finest and best of women. We also know, that in those classes of society where children are sent to training schools from poor households, where the mothers, it may be, take in washing, and earn their living by the sweat of their brows, and pamper their girls, who are getting an education in the grand State Normal College, learning to play upon the piano, who come home and let their mothers do everything for them, and thenceforth, all of their lives, look down upon this poor, toiling, suffering woman, are the girls who make the very worst use of their advantages, those whom both society and their parents have spoiled. And we also know that in those poor Oliver Twist establishments, where the children are brought down to the very verge of starvation, who have to earn their living, as it were, by the sweat of their brow, who have no friends, nor means of palliation of their condition, how poor they are all their lives; how all the elasticity and strength is taken out of their young lives, how they are like the stunted oak upon the mountain—they amount to nothing. The truth lies between these two extremes. It is a grand thing to have had these pictures brought before us, as a warning, under all circumstances; it is well for us always to act with wisdom, with love, and with a true desire to make every child confided to our care, whether a deaf mute or a hearing person, such as it should be, in all of its connections and relations with the world. [Applause.]

MR. J. L. NOYES, of Minnesota: I am very glad that this subject has been brought before us. I am very happy to bear testimony to the fact that from my inquiries into the condition of the deaf mute children in our State institutions, my conviction is that the men who are at the head of these institutions endeavor to lay out before themselves a work which, in its bearings, shall not be temporary, but shall be permanent, and of an exceedingly high order; that they try to so arrange affairs in institutions of this kind, in all of their

departments, in their educational work, in their industries, in their amusements and recreations, in their social life, and in all their appointments, as it becomes a good, Christian household. We take these children, many, and, perhaps, the majority of whom, may be called the waifs of society—but these waifs do not all come from poor families—and we introduce them into this Christian household, and give them a start, give them an idea of what study, of what behavior, of what thoughtfulness, of what kindness, of what industry, and of what pleasure and recreation should be, and so establish them in all of their associations, and so fix habits in them that by the time they go out into the world they are rooted and grounded in those primary, fundamental principles which characterize a good citizen, and a useful member of society. We all know by experience that it takes quite a time to habituate a boy who has run riot in the household, who has never known anything about discipline, or what deference he ought to pay parents, brothers, and sisters, to observe the rules of the household. I could give you chapter and verse in some of our very best families, were it necessary. Put such a child as that into a Christian school, let him from day to day rise at the proper time, make him pay proper attention to his ablutions, to his necessary fitness of apparel, to his behavior at the table, and deportment on the playground and in the school-room, and in all places; let him become habituated to that from time to time, and in eight or ten years you may expect, and have reason to believe confidently, that that boy will never depart from these good ways. And, Mr. President, I ask for no further confirmation of what I have said than the lives of the young gentlemen and young ladies here to-day, who are graduates of our institutions. [Applause.]

On motion of Mr. WILLIAMS, a question box was established for the use of the members of the convention.

REV. THOS. GALLAUDET, of New York: It is with great pleasure that I direct the attention of the convention to this painting of my beloved father, which has just been hung upon the wall. It is a very fair representation of him. It is painted by Miss Mary Peek, a teacher of art in the Illinois institution, at Jacksonville. It is a copy of a picture which is now in the National Deaf Mute College. Mr. Wright, of Hartford, was the artist there. The artist has taken a little license, but presents him very much as he appeared to us in our early life. You, of course, all know his history. He was the founder of the first school for deaf mutes in this country, in Hartford, Connecticut, April 17, 1817. He showed his deep interest in deaf mutes, how full his heart was of love for them, in proposing marriage to one of his first pupils, so that my mother was a deaf mute. She was honored by bringing up a family of eight children, of whom I am the oldest, and Dr. Gallaudet, there, of Washington, is the youngest.

I made up my mind when I began to get acquainted with young ladies, in college days, and so forth, that I would not marry a deaf mute, myself. I went to New York in the fall of 1843, at the invitation of Dr. Peet's father, to become a teacher there, and my wife very fully converted me from the error of my ways; and, therefore, I have a deaf mute wife as well as a deaf mute mother. [Applause.]

The Committee on Order of Business reported, recommending that two sessions of the convention be held daily, from nine to twelve o'clock A. M., and from two to five o'clock P. M., and, if necessary, a third in the evening; that the entire morning be devoted exclu-

sively to normal work, and afternoon session to the general work of the convention; that there be a general "query box" placed in a convenient position in which all questions relating to our work may be placed and referred to the proper divisions; that Mr. Ely, Chairman of the Normal Departments, have charge of the work of each morning and report line of work day by day; that no paper exceed twenty minutes and no speech ten minutes; that a Sunday Conference be held at three o'clock, at which moral and religious subjects pertain-
ing to our work may be discussed.

The following order of business will be observed:

A. M. First—Prayer.

Second—Normal Department.

P. M. First—Reading of Minutes.

Second—Reports of Committees.

Third—Reading of Communications.

Fourth—Reading of Papers.

Fifth—Discussion.

Sixth—Miscellaneous Business.

The report was adopted.

The Committee on Enrollment and Credentials reported the list of delegates present, as follows:

1. AMERICAN ASYLUM.—Job Williams, Principal; Dr. G. O. Fay, Abel S. Clarke, Miss Ida V. Hammond.

Honorary Members.—Miss Clara D. Capron, Mrs. A. B. Hendryx, Miss Alice A. Hendryx.

2. ARKANSAS.—F. D. Clark, Principal.

3. CALIFORNIA.—Warring Wilkinson, Principal; G. B. Goodall, C. T. Wilkinson, T. d' Es-trella, Henry Frank, Douglas Tilden, Miss A. B. Carter, Miss M. A. Dutch, Miss K. A. Crandall, Miss M. Day.

Honorary Members.—Hon. George Stoneman, Governor of California; Hon. Geo. E. Whitney, Hon. A. L. Chandler, Hon. E. W. Playter, Hon. R. A. Redman, Hon. Geo. H. Rogers, H. A. Palmer, T. A. Lord, W. L. Prather, Dr. I. E. Nicholson, Hon. W. T. Welcker, Superintendent of Public Instruction, Prof. Geo. Howison, Prof. John Le Conte, Prof. Joseph Le Conte, Prof. W. B. Rising, Prof. Martin Kellogg, Mrs. W. Wilkinson, Miss Maud Wilkinson, Mrs. Geo. Stoneman, Mrs. H. B. Willard, Miss J. Osgood, Miss M. J. Wiseman, Miss E. Shaw, Miss M. E. Wright, Theo. Grady, Ira P. Rankin, Rev. J. A. Benton, D.D., Rev. B. F. Cray, D.D., Rev. G. A. Easton, D.D., D. D. Shattuck, T. L. Barker, Dr. J. S. Eastman, Dr. W. A. Grover, Oscar Krutmajer, of Stockholm, Miss Noyes, of China, C. S. Perry, Mrs. C. S. Perry.

4. CHICAGO DAY SCHOOL.—Mrs. P. A. Emory, Miss Grace D. Emory, Mrs. Mary A. Woodworth.

5. CHURCH MISSIONS.—Rev. Thomas Gallaudet, of New York; Rev. A. W. Mann, of Ohio; Rev. Job Turner, of Virginia.

6. CLARKE INSTITUTION, MASSACHUSETTS.—Miss R. E. Sparrow.

Honorary Member.—Mrs. Sparrow.

7. COLORADO.—D. C. Dudley, Superintendent; H. M. Harbert.

Honorary Member.—Mrs. C. C. Wynn.

8. DAKOTA.—James Simpson, Principal.

Honorary Member.—Mrs. James Simpson.

9. DESERET INSTITUTION, UTAH.—Henry White, Principal.

Honorary Members.—Dr. J. R. Park, J. B. Toronto.

10. GEORGIA.—W. O. Conner, Principal.

Honorary Members.—Hon. J. S. Stewart, J. S. Stewart, Jr.

11. ILLINOIS.—Philip G. Gillett, Superintendent; Mrs. A. J. Griffiths, Miss Mary Selby, J. A. Kennedy, Miss Elinor Patten, Miss Mary Peek, Miss Fannie Wait, D. W. George, Miss Alma Gillett, Miss C. Luttrell, Miss C. Gunn, Miss F. Henderson, George Wing, Miss Lou Gallaher, T. J. Rogers, Philip Hasenstaub.

Honorary Members.—Mrs. P. G. Gillett, Mrs. C. Bull, C. P. Gillett, P. F. Gillett, Miss J. V. Gillett, Hon. M. A. Cushing, Mrs. Imogene Cushing, Miss Annabel Powers, A. E. Ayers, Miss Grace Ayers, Miss Miriam Morrison, Miss Jane Russel.

12. INDIANA.—Dr. W. H. Latham, Wm. A. Caldwell.

Honorary Members.—Mrs. W. H. Latham, Mrs. Wm. A. Caldwell.

13. IOWA.—H. C. Hammond, Superintendent; G. L. Wykoff, Superintendent elect; D. W. McDermid, C. Spruit.
Honorary Members.—Miss Sarah E. Wright, Mrs. H. C. Hammond, Matron; Louis Weinstein.
14. KANSAS.—S. T. Walker, Superintendent; R. T. Thompson, E. W. Bowles, Miss Effie Johnson, Miss Jessie Eggleston, Frank Metcalf, Edward P. Gale, Miss Addie McClure.
Honorary Member.—Mrs. S. T. Walker.
15. KENDALL SCHOOL, WASHINGTON, D. C.—James Denison, Principal; T. A. Kiesel.
16. KENTUCKY.—W. K. Argo, Principal; Mrs. Ella Warren, Miss Jennie Lee.
Honorary Members.—Mrs. Clara Lee, Allie Lee, Miss Zoe Welch, Miss Ella Warren.
17. MAINE.—Miss Ellen L. Barton, Principal of Portland School for the Deaf; Miss M. H. True.
Honorary Member.—Mrs. Frances A. Strickland.
18. MARYLAND.—C. W. Ely, Principal; G. W. Veditz, Miss M. R. Harris, Miss K. H. Fish.
Honorary Member.—H. J. Gill.
19. MICHIGAN.—M. T. Gass, Superintendent; Thomas L. Brown, Willis Hubbard.
Honorary Members.—Miss Phebe Wright, Miss Adelaide Birdsall.
20. MILWAUKEE DAY SCHOOL, WISCONSIN.—
Honorary Member.—Mrs. Ann E. Chapman.
21. MINNESOTA.—J. L. Noyes, Superintendent; Miss Mary E. Griffin, J. L. Smith.
Honorary Members.—Mrs. J. L. Noyes, Hon. Geo. E. Skinner, Mrs. Geo. E. Skinner.
22. MISSOURI.—W. S. Marshall, Assistant Superintendent; Mrs. W. S. Marshall, H. C. English, Miss D. A. Grimmett, D. C. McCue, Mrs. D. C. McCue, Miss E. Reed, Miss Mary Harris, J. N. Tate.
Honorary Members.—Mrs. H. C. English, Miss M. Provines, Miss Josie Provines, Mrs. Hughes, W. N. Marshall, Miss Nellie Wheeler.
23. NATIONAL DEAF MUTE COLLEGE, WASHINGTON, D. C.—E. M. Gallaudet, LL.D., President; Samuel Porter, Edward A. Fay, John W. Chickering, Jr., John B. Hotchkiss, John J. Chickering, Arthur D. Bryant.
Honorary Members.—Margaret Allen, Mrs. E. A. Fay, Miss K. F. Gallaudet, Denison Gallaudet, Edson Gallaudet, John A. Jameson, Jr.
24. NEBRASKA.—J. A. Gillespie, Principal; J. N. McClure, Miss Minnie S. Cox, Miss Frankie Saunders.
25. NEW YORK.—Dr. Isaac Lewis Peet, Principal; Mme. Le Prince, G. C. W. Gamage.
Honorary Members.—Mrs. I. L. Peet, Hon. Erastus Brooks, Miss Bertha Brooks, Miss Gertrude Walter, Miss Caroline Park, Mrs. L. C. Searing, Rev. Dr. Storrs.
26. NEW YORK (WEST).—Z. F. Westervelt, Principal; Miss Penelope Reed, Miss Lucy McMaster.
Honorary Members.—Miss Caroline Perkins, Miss Angie Powell.
27. NEW YORK (INSTITUTE FOR THE IMPROVED INSTRUCTION).—Dwight L. Elmendorf.
28. NEW YORK (LE COULTEULX).—Sister Mary Ann, Principal; Sister Mary Dosetheus; Miss Margaret Staunton.
Honorary Members.—Rev. P. S. Dunne, Rev. Dr. M. Faune, Rev. J. D. Biden.
29. NEW JERSEY.—Weston Jenkins, Principal.
Honorary Member.—Mrs. W. Jenkins.
30. NORTH CAROLINA.—W. J. Young, Principal; E. McK. Goodwin, Miss L. B. Turlington.
31. OHIO.—Amasa Pratt, Superintendent; Geo. W. Halse, Miss Mary B. Straw, Miss Mary C. Bierce, Miss Carrie M. Feasly, Miss G. Camp, Miss Anna Frost.
Honorary Members.—Mrs. G. W. Halse, Hon. J. S. Hare, Mrs. A. W. Mann.
32. ONTARIO, CANADA.—R. Mathison, Superintendent.
Honorary Members.—Byron Nicholson, T. S. Carman.
33. OREGON.—P. S. Knight, Superintendent; Miss —. Woodmas, Miss Elizabeth Early.
Honorary Member.—Mr. Brewer.
34. PENNSYLVANIA.—A. L. E. Crouter, Principal; F. W. Booth, Geo. L. Weed, Miss Laura De L. Richards, Miss Julia A. Foley.
Honorary Member.—Miss Mary A. Silloway.
35. RHODE ISLAND.—Miss Anna M. Black, Principal.
36. SOUTH CAROLINA.—S. S. Rogers.
37. ST. LOUIS DAY SCHOOL.—Delos A. Simpson, Principal.
38. TENNESSEE.—Thomas L. Moses, Principal; L. A. Houghton, Miss Bettie Davis, Miss —, Jackson.
39. TEXAS.—Rev. W. Shapard, Superintendent; I. W. Blattner, Principal; C. W. Simpson, Miss Lulu A. Jones, Miss Ola L. Wright, Miss Emma Shapard, Wm. H. Lacy.
Honorary Members.—Miss —. Shapard, Miss Sarah Walton.

40. WASHINGTON TERRITORY.—W. D. McFarland, Director; Geo. Layton.
Honorary Members.—Miss E. Van N. Young, Miss Clarissa McFarland.

41. WESTERN PENNSYLVANIA.—Miss J. A. Shrom.

42. WESTERN VIRGINIA.—E. L. Chapin.

43. WISCONSIN.—Miss Mary M. Jameson, Miss Alice Turley.
Honorary Member.—J. A. Jameson.

The convention here took a recess to two o'clock P. M.

AFTERNOON SESSION.

PRESIDENT GILLETT, in the chair, called the convention to order, and introduced the Hon. George Stoneman, the Governor of the State of California.

GOVERNOR STONEMAN: As Executive of the Commonwealth of California, I take very great pleasure in performing the duties of host, which have been assigned me on this pleasant and profitable occasion.

We hope you will make yourselves at home during your stay with us, and help yourselves to anything that comes in your way. If you desire a big squash or melon, or mammoth beet or turnip or cabbage, you will have but to say the word. Just put it in your trunk and take it home with you. We can show you fields of waving grain, measured by the thousands of acres, and fruits of every description measured by the carload. We can point with pride to the fastest horses, and some of the finest men and women in the land, east or west. You will find that the people of California are never satisfied unless their efforts are equal to any and every occasion.

I had almost forgotten to mention the greatest of all the great things for which California is noted the world over, and that is, her climate. When the stranger comes among us and is inclined to grumble and find fault with what he sees, hears, and feels, we stuff him with climate until the poor fellow is forced to cry out "Enough!"

There is one thing we have of which we all feel justly proud, and that is our eleemosynary institutions; and of them all, perhaps the Deaf and Dumb and the Blind Asylum is one of the most conspicuous. Located in the center of a dense population, and accessible to the whole people of the State, convenient to the sources of supply, surrounded by the beauties of nature—which, alas, the poor blind are unable to see and appreciate—with a corps of instructors not surpassed by any other like institution, with every improvement, both mental and mechanical, of modern times, it ought to be, and we claim it is, a model, and one which deserves the fostering care of a generous and appreciative public.

As an adjunct to this institution, we have another at Santa Clara, for the feeble-minded, a most eminently deserving charity, both of which have enlisted my sympathies and all the aid and countenance I have been able to give them.

You have done us the honor and the credit to come thousands of miles to see us, to ascertain who and what we are, and what we are doing. We hope before you return to your eastern homes that you will have the time to visit all our eleemosynary institutions and show us wherein we are behindhand, as compared with similar charities in the older States which you represent.

It has become a feature of the times to hold interstate and interna-

tional conventions to discuss principles and practices for the alleviation of suffering and the benefit of mankind. The world is fast becoming one great family, and each generation is better than its predecessor; and it behooves each one of us to contribute what may be in his or her power to advance the general good of all. [Applause.]

HON. MR. BROOKS: Mr. Governor of the State of California and ladies and gentlemen: By the request of the President of this convention it is my pleasure, as it is my privilege, to respond to the welcome which we have received from the Chief Magistrate of this State. He reminded us in his last sentence that throughout the world we were of one family. And that recalls the sentiment of Holy Writ which says, "God has made of one blood all the nations of the earth to dwell upon the face of it." We are indeed one family; more than ever in the United States of one mind, one purpose, and one future, in unity, in prosperity, and in activity. [Applause.]

The Governor has been pleased to remind us that in California they are a restless people. I have never seen an American-born citizen who was not a restless mortal, moving onward and forward all the time; beginning as we all know in the early history of the country with perhaps three millions of people, and to-day numbering more than fifty-five millions of people. In my boyhood the center of the nation was in the State of Vermont; to-day it is west of the City of Cincinnati. A few years hence who can tell where it will be?

A great thought is that in the State where I was born, the State of Maine, more than three thousand five hundred miles distant, a man may travel all this way and reach the Pacific, and yet geographically can travel as many more miles before he reaches the end of the nation. No fact could possibly give a grander or a larger idea of the extent of the country than a statement like this.

In my earlier life, as a resident of the City of Washington, I knew something of the beginning of this State. I remember the time when Senator Foote, of Mississippi, said upon the floor of the Senate Chamber, near the close of a session, that if his party would stand by him he could speak thirty-six consecutive hours and keep California out of the Union by the expiration of that short period of time. And he commenced that work; and he was the most extraordinary man for lung power and words that I have ever seen or heard before or since. And if his party had stood by him he would have kept California out of the Union for that session of Congress by talking the bill to death for her admission to the Union. What a change since then! Those were in the great days of Clay of Kentucky, of Webster of Massachusetts, Calhoun of South Carolina, Poindexter of Mississippi, and Sprague of Maine; of a brilliant class of men not one of whom is living to-day. No man is living to-day who was in the Senate of 1835-6, and only five or six of those who represented the nation at that time in the House of Representatives. The population has increased as we have seen it until this great State, so wonderful in its attraction, has drawn us here by the magnetism of those who represent it, by the gifts of Providence in the wonderful produce of the soil.

The thought which impresses me most strongly at this time, is that in all of the divisions of opinion in the past, in those memorable times which separated the States of the Union one from the other, when you, sir, in the discharge of your duty, was upon the side of the country, and some, unwisely, were not upon the side of the country,

we have seen the old spirit of dismemberment, the old spirit of disorganization, changing into a manly and womanly love for the country and the whole country [applause]; not one star polluted, not one stripe erased; bearing for its motto no such miserable question as "What is all this worth?" but everywhere, on all its ample folds, wherever it shall float, upon the sea or upon the land, those other words dear to every American heart, "Liberty and union, one and inseparable, now and forever." [Applause.]

Sir, there are distinctions in States and peoples. In the providence of God it is your pleasure to preside over a State, gifted as you have said in its climate so that it is distinct from almost every other State in the Union. And if I am permitted for a moment to draw a parallel between this State and another, between the rock-bound coast where I was born and the Golden Gate in sight of all of us here, I would say it is simply the distinction that, as States we are distinct like the billows, but one, like the sea [applause]; and that is about all the distinction there is between us.

Sir, I beg leave, in behalf of all these people you see before you, representing the deaf and dumb, and some of the blind institutions, to thank you most cordially for the welcome you have given us here to-day. It will be a pleasant memory in our future lives. [Applause.] We are thankful for two things especially; for the domestic welcome which we have received at the hands of those who are permitted the great task, and I hope in a certain sense the privilege of entertaining so many people from distant parts of the Union, and for your honor's welcome. We are glad to be here; and as we leave this welcome place for our own homes, so many miles away, we shall bear witness to the cordial welcome of the Executive of the State and the constituents whom he represents. [Applause.]

THE CHAIRMAN: I have now the pleasure of introducing to you the President of the Board of Trustees of this institution, Hon. R. A. Redman.

JUDGE REDMAN: Ladies and gentlemen, the chief executive officer of the State, Governor Stoneman, having extended to you the right hand of fellowship on behalf of our fellow citizens at large, it becomes my agreeable duty to receive you on behalf of the Board of Directors of the Deaf and Dumb Asylum of the State of California.

I therefore extend to you our most cordial greeting, and welcome you as the friends of progressive education, devoted to the welfare of those whose silent tongues, though they speak not, appeal most eloquently to the tenderest affections and earnest considerations.

I trust that your convention may be a success, and that your fondest anticipations may be fully realized, and also that you will show to the public what vast improvements have been made in teaching the deaf and dumb. I might suggest here, without impropriety, that there seems to be a general misapprehension in the minds of most people, as to the nature, character, and importance of these institutions, the general impression being that they are a sort of charity, because, perhaps, the name of "asylum" is often employed. Our institute is called an "asylum," giving the impression that the inmates are pensioners upon the public bounty. This is a great mistake, and I seize upon the opportunity of correcting it at the expense, possibly, of a digression; but I do so with the hope of attracting public attention to your proceedings as they shall appear in the daily press, as you proceed with your work. While it is quite true that

many of these institutions are called asylums, the fact, however, is that they are purely educational, as much so as are the high schools, the normal schools, or the State University itself. [Applause.] Practically speaking, they are a part of that principle which recognizes the doctrine that it is the right and duty of organized society to provide a system of public education for all those who desire to avail themselves of it; and the matter of the student being deaf and dumb cuts no other figure than merely to determine as to which of these State institutions he shall be sent. We all know, and it is a source of much consolation, that deaf mutes are susceptible of the highest degree of scholarship; that they can become proficient in most of the arts and sciences, and skillful in many mechanical trades; and that their lives may be rendered as contented and happy as are those who can hear.

Now, I do not mean to criticise nor underrate the general public intelligence, in what I say, but I do find, in general conversation, that very few persons, outside of those more or less directly interested, have ever heard of the subject of teaching the mutes to speak. I refer to "articulation," as you term it in the schools. Not long since a gentleman called here and met one of our pupils near the gate (a colored boy). The visitor knew the boy very well, and knew that he had been deaf and dumb from infancy. The pupil, supposing that the visitor desired to see our Principal, politely stepped forward and said, in his articulative, monotonous tone, "Mr. Wilkinson has gone to Oakland." You may imagine the astonishment. The gentleman admitted to me that his "hair stood straight up," but he denied that he sprang into his buggy and laid on the whip. He thought that a miracle had taken place [applause] in his immediate presence, and that he smelled sulphur. So will many people be surprised when they see this little story in print, but may not be so badly frightened, being at a safer distance.

In conclusion, allow me, on behalf of the Directors, to place you in the care of our worthy Principal, Professor Wilkinson, who is a host within himself. [Applause.] Should you get hungry, or even thirsty, just speak to him in the sign language; he will understand your wishes.

I wish you all much personal happiness. We extend to you the freedom of the institute and its surroundings. We bid you thrice welcome, not only as guests who are worthy of our best efforts to entertain, but as guests whose presence here upon the present important occasion confers upon our institution and State an honorable distinction which we fully realize and appreciate, and we unite with you in the hope that much good may result from your councils. [Applause.]

THE CHAIRMAN: I will now introduce to the convention Professor R. Mathison, of Belleville, Canada.

MR. MATHISON: Mr. Chairman, Your Excellency, The President of the Board of Trustees, ladies and gentlemen: I feel a little lonely over here among so many Americans. But I have been doing my best ever since I left Chicago to get acquainted with every one that was coming to this convention, and more especially with the ladies. [Laughter.]

I have heard in the past a great deal about your glorious climate and your glorious country, and I think I have heard a good deal about it to-day. This morning it was nothing but the American Union,

no word about Canada. I know this is a great country; it is one of vast extent. But you must remember, and it will be well if you did not forget the fact, that we have more square miles in our British possessions than you have in the United States, including Alaska. [Laughter.] Your country is vast; and your agricultural resources are vast, too. There is one thing that we cannot vie with you in, though—that is the great American desert. [Laughter.] We have no deserts in our country, so you are just one ahead there. [Laughter.]

Your institution here is, I think, all that our fancy pictured it. It seems to be equipped with everything that is necessary for the education of the deaf and dumb and the blind. I might say that in Canada our institution is not quite as large as this; in fact, that we have not so many institutions in Canada as you have in the United States. So you are ahead of us there again. I am very sorry indeed that there is a necessity for so many institutions anywhere. As there is a necessity, however, I do not think that the education of the deaf and dumb could be committed to better hands than those who are here. I have conversed with a great many on the train, and they all seem imbued with one spirit—that is, what is the best method of advancing the interests of those committed to our care?

In Canada we have a number of institutions. In Ontario, the one which I have the honor to represent in this convention, we have two hundred and forty-five pupils and thirteen teachers, and we are very well equipped. The money that is required is freely given for the education of the deaf, dumb, and blind. The education of speaking children there is attended to, and the deaf and dumb and the blind are not forgotten. Our educational system in Ontario is equal to any in the world, not excepting the United States; and our children may go from the primary school to the university, and all free. Our institution for the education of the deaf and dumb is not free theoretically, but it is practically. We get them in from all quarters, and we are glad to get them; we are pleased, and, indeed, we want all of the work of that kind that there is to do in the country. And our other institutions for those afflicted are equal to those of any State on this side that I have seen. The asylums for the insane are models of the kind; the reformatories are models; the industrial schools are in good hands, and without what I have heard so much of in this country, bullying and politics. Everything there in connection with educational institutions is entirely separated from political matters. [Applause.] Persons in positions there are selected for their fitness. You will excuse me if I make this remark. [Laughter and applause.] We are very well known as a modest people. [Laughter.] I have had occasion to remark that many times during the trip, and to tell a number of my friends who have asked me what we did in Canada, that our modesty, in fact, has kept us back.

Your country here has advanced with rapid strides. You have fifty-five millions, while we have not quite so many. We have a country though large enough to contain as many millions as you have, and I presume that in the future we shall have quite as many. You have many railroads here, and very extensive ones, and very long lines. We have had occasion to use some of them. You have narrow and broad gauge roads. In our country we have discarded narrow gauge roads; they are not fast enough for us. We have a railway much longer than you have in the United States. Count us one ahead there, please. I am very glad indeed to be with you. As I said

before, I did feel a little lonely at first; but I do not feel so lonely now. Before I leave this country I expect to make the acquaintance of every one connected with this convention. If I do not, it will not be my fault. I appropriated to myself a part of the welcome which has been extended, although Canada was not mentioned. I suppose they did not think that little country up there amounted to much; but I appropriate the welcome which has been so cordially extended, and I shall do my very best to appropriate all of the privileges that come within my reach. [Laughter.]

I will correct one impression. You all seem to think that Canada is a very cold country, and you have been sympathizing with me on this account. Your sympathy is wasted in that direction, for we have just as much hot weather up there as you have sometimes. The cold there is not so intense as some of you seem to imagine. We live there and exist. I am a fair specimen of a Canadian. I was born there, and the cold does not shrivel me up as much as the heat does a great many of you down here. I did not intend to say anything when I commenced, and probably I have not. [Applause.] I am very glad indeed you have extended so hearty a welcome to me. I appreciate it, not as to me personally; but it is to the Empire, a member of which I am, and a part of which at one time you belonged to. [Laughter.] You thought that perhaps a little home rule would suit you best, and I think probably it has. You seem to be well able to take good care of yourselves; and you know every man likes a little home rule; that is, if his wife allows him to have it.

In conclusion, ladies and gentlemen, I hope we shall all be friends; that the dividing line will not interfere with us in the work which we have come out here to do, and the work which we are all pretty well paid for. [Applause.]

I think the devotion of this band of ladies and gentlemen cannot be questioned, when they will brave the dangers of that American desert and of those mountains to come here to meet in California. I might say that I did not think I would come at first, and wrote to Dr. Gillett and said that the distance was too great and the expense was too great. The distance is very far indeed, and the expense is great, too; but then we have not got as much money in Canada as you have in the United States. But I changed my mind. You know a wise man can change his mind. I changed mine, and am very well contented. I would not have lost the trip for anything. I could not possibly see such mountains in our country as we have passed over in coming to this place; and we have not so many of them, and they are not so high, and so are not so sterile in our country. [Applause.]

However, variety is the spice of life, and we have had an exceedingly great amount of variety all along the route. We have had good meals and bad meals, good water and bad water, good lager and bad lager, and everything else good and bad, and have come here to a land flowing with milk and honey, with peaches and blackberries, which are my especial delight; and I have heard many say the same thing. If you treat the Canada delegation the same for the next week as you have in the past twenty-four hours, I think I will be inclined to stay with you a little while. But when I get back I shall say I think with the quotation,

"Breathes there a man with soul so dead,
Who never to himself has said:
'This is my own, my native land.'"

[Applause.]

THE CHAIRMAN: I understand there is a gentleman in the house, a very firm and fast friend of this institution, Senator Whitney, whom I will ask to come forward and address the convention.

SENATOR WHITNEY: This is certainly a surprise to me, to be called upon to say anything to you on this occasion. I had no intimation of it. If I had I should have felt it to be worth all my best endeavors to say something to those who have come so far, and under such circumstances of discomfort as have been detailed to us by the gentleman who last took his seat, to give us this pleasant visit. I am sure that we in California appreciate it, and the members of this institution and all the people of the State will strive to find a place in our hearts large enough to take you all in, and keep you there as long as you shall remain in the State, and even then to hope that you may again return to us at some future time. [Applause.]

Allusion has been made to the fact that I have heretofore been a friend of the institution. I am only sorry to say that my capacities in that particular have not been equal to the heart with which I view all institutions of this kind. And as I come here, year after year, at the exhibitions of this institution, and see the evidences of intelligence of those who are shorn, in part, of those powers which a kind Providence has endowed the most of us with, exhibit, I feel almost as though it were a blessing even to be shorn of the gift of speech. There is a grace, a beauty of intelligence, a charm of action, something which seems to attract, which I find in the schools of these institutions, which I do not find in any other place. It does seem to me, as I observe their progress from year to year, that their means of communication are as perfect and certainly most graceful and charming. So I have often thought whether or not it would not be a good idea if we had, in all of our common schools, a department where this beautiful sign language should be taught, where people should be taught to understand and appreciate the eloquence of the eye, and the grace of motion which you acquire here much more than we do, who are, as we say, blessed with other and further powers. At any rate, nature compensates for all. And everything that I have been able to do has been nothing to what was in my heart at all times to do. I think you will find evidences of the generosity of the people of California in this magnificent institution. It is not too much to say that we are proud of it. We are proud of him who stands as its head [great applause], and who, for all of these long years, has devoted himself to building it up, with a devotion which is as rare as it is thorough and efficient.

Ladies and gentlemen, I did not think to say anything, and I have said more than I intended. I can only say that I thank you for an opportunity of looking you all in the face and of saying these few words of welcome. [Applause.]

THE CHAIRMAN: In the year 1863 I was visiting the New York Institution for the Deaf and Dumb, and Professor Wilkinson was then one of the instructors of that institution. I remember we were very much stirred up at that time by the events which were transpiring around us, and further at the south, and, getting up quite early one morning, I saw Professor Wilkinson, with the "New York Tribune" in his hand, running up and down the hall, crying, "Where is Stoneman? Where is Stoneman?"—almost wild. He is the brother over here who was after Stoneman just then, and I want Mr. Connor to come and tell us all about that. [Laughter and applause.]

MR. W. O. CONNOR, of Georgia: About that time I happened to be down in Macon, Georgia, with a wound that I had received. We heard of General Stoneman's approach to Macon, and it appeared as if he was going to come in there, and they called upon us hospital rats to muster, and while I was not after him, yet I was armed and ready to go, if somebody else had not caught him first.

However, about one year after that, up at Salisbury, North Carolina, I was present again, and he just reversed the thing, and caught me. I belonged to a battalion of artillery, and he captured it. It is a great pleasure and privilege for me to be here and to be caught again by the General and his Californians.

I never attempted to make a speech in my life. As I said, I am very glad to be here, and I think we all are. I have enjoyed my trip very much, indeed, so far, and expect to enjoy it, and expect to hold on to it as one of the pleasantest memories of my life. [Applause.]

THE CHAIRMAN: One of the great acquisitions that the State of California has received from the East is Professor Warring Wilkinson, and the man who discovered him in New York is here this afternoon, and while we do not bear any malice against him and the Californians for taking Professor Wilkinson away, we should like him to give you an account of himself, at any rate. That gentleman is Mr. Ira P. Rankin, of this State, I understand.

MR. IRA P. RANKIN: Mr. President, ladies, and gentlemen: I did not come here to make a speech. A few moments ago it was intimated to me that, as one of the former Directors of this institution, I might be requested to say a few words.

It is many years since I have had any connection with this institute, but my recollections of service in connection with it are very agreeable to me. I look back upon them with a good deal of complacency and satisfaction.

A Board of five gentlemen, three of whom, I think, have passed away, and one of whom—Professor Benton—I see here this afternoon, were appointed by the State Legislature to take charge of the property which had fallen into the hands of the State at the Mission. We were authorized to sell that property the best way we could, and select at our pleasure, wherever we could find it in the State, a site for the new institution, and use the avails of that property for buying land and building a new institution. We sold it for \$35,000, and after we had bought this land we had something like \$85,000 to erect and establish an institution.

I recollect that our Commission went out in the very midst of the cherry harvest, and we were called to various parts of the State—to Santa Clara, Martinez, and other places. Wherever we went we were taken, the first thing, into the cherry orchards, and invariably helped ourselves to eat as delicious cherries as can be found anywhere in the world. This is the result of our search. We came to this place. There were no cherries here; no trees or shrubs in sight in all this location; but with an imaginative eye, I suppose, we saw what this place was capable of becoming, and we secured this site—in the first place forty acres of ground here, and afterwards eighty acres, running from the road to the hills, making a hundred and twenty acres—and built the institution upon, I think, the very site of this building—a stone building—the whole institution being at that time embraced within those walls only, and we had great satisfaction in carrying through the enterprise; and, Mr. Governor, I can say this: You will

appreciate the kindness with which we were treated. We spent a great deal more money than we were authorized to do by law—we were prohibited expending any more money than arose from the proceeds of the sale of that land. When we came to contract for a suitable building we found that it would cost about \$125,000, while we had but \$50,000, and it would be two years before the Legislature would meet again. We saw that the money we had to use was entirely inadequate. We trusted to our own judgment, and the confidence which we had in the authorities of the State, to go on and make our contracts, only subject to the condition that when we had expended our money the contractors were bound to stop. But when the Legislature came together, in the mutations of politics, the Legislature at that time had become a Democratic Legislature, yet they gave us every dollar of money we asked for. [Applause.] They sent their committees here to investigate and examine into our doings, and I think Professor Wilkinson, who was here, will agree with me in saying that at no point did they criticise any expenditure or contract we had made; and I believe they approved everything, which says a good deal, either for the capacity, integrity, or plausibility of the Board of Directors who had the business in charge. At all events, they found no fault with us.

But I think the greatest thing we did was the very thing, Mr. Chairman, which you referred to—sending East about that time and getting Professor Wilkinson out here to take charge of this institution. [Applause.]

Of course we knew nothing of this matter of instructing the deaf and dumb and the blind, technically or professionally. We were not experts. But so far as our judgment went, he was the man pre-eminently qualified for Principal of such an institution. [Applause.] He has so commended himself, from that time to this, to the people of the State, to the authorities, to the Legislature and the executive officers of the State, that when he has gone to the Legislature at any time to ask for appropriations for additional buildings, additional facilities of any kind, he has been successful. I cannot say, positively, that his success is entirely owing to the confidence that the Legislature has in every case, in his integrity and ability—it may be that his eloquence is so winning and persuasive that he has prevailed upon them and gained their sympathies, against their superior judgment. I do not know how that is, but, somehow or other, when he has gone up there, and particularly when he has taken Mrs. Wilkinson with him, I believe he has never, from the first, failed to get anything he has asked for. [Laughter and applause.] And you see the result in this institution as it stands here to-day, a beautiful institution, well equipped, upon a site which, it seems to me, could hardly be excelled if you look the world over.

I am trembling a little for Professor Wilkinson. He has been dealing for a good many years past with people in his plausible way, who do not know very much about the business that he is supervising. But he now has a committee of experts here to deal with, and it is very possible that they may find some flaws in his system or in his mode somewhere, of carrying on this institution, which we have never discovered. If that should be the case, I pity and sympathize with him. But I hope he will pass scathless through even such an investigation.

I am sure that I, in common with all the citizens of California,

welcome very cordially to our State and city the representatives of these institutions, and I hope your time will be passed very pleasantly and profitably here, and that you may find, out here in California, on this outskirts of civilization, as it is sometimes called, some new ideas that have been evolved here, which you can carry home to the institutions with which you are connected on the other side of the continent.

THE CHAIRMAN: We have heard from Canada, from the Atlantic seaboard, from the sunny South, and I will now call upon Hon. George E. Skinner, of Minnesota.

MR. SKINNER: Ladies and gentlemen, I might begin my remarks by saying that I am a '49er, coming to the State of California in 1849. Of course you may imagine my surprise at the improvements, and if my remarks are short it is because of the great surprise I have experienced in seeing the improvements that have been made in this time. I have been very much interested in the remarks that have been made, not only by the Chairman of the Board of Directors, but also by the last gentleman who has had the floor. It is the practical effect and business effect of these institutions which I, in a few remarks, propose to refer to.

In the first place, I agree with the gentleman, the President of the Board of Directors of this institution, that these are not charitable institutions; that they are institutions of learning; that every deaf, dumb, and blind child in the United States is as much entitled to an education as your child or mine, in any institution in the land. [Applause.] I trust and hope that every State in this Union where these institutions are designated as "asylums," will change it, as we have in Minnesota, to "educational institutions." [Applause.]

There have been some remarks made here about the manner of obtaining money to carry on these institutions. Of course it requires a vast amount of money. I have no doubt there are millions of dollars invested in these institutions, and their current expenses require a vast amount of money. But it only requires that the people of every State should have confidence in the Directors. When they have that, you will, in my opinion, receive all the money you require. And if, through the application of your Superintendents you do not succeed, I will tell you one process that never fails; we have had a little experience of that in Minnesota. We wanted thousands and thousands of dollars there, at one time, to build up the institution. We had made application to the Legislature, and of course those members coming in did not fully realize the position we were in. It was finally suggested, after the institution had been carried on for a few years, that we should invite the Legislature to an exhibition, and that after that our Superintendent, Mr. Noyes, would take charge of the balance of it. They came down there in a body, and the pupils went through their exercises, and the exhibition I remember quite well. Mr. Noyes invited a young lady who was to graduate at that time, upon the stage, to say the Lord's Prayer in the sign language, which she did, before that assembled body of legislators. I had a little curiosity to see the effect which that had upon those men, and I saw tears rolling from eyes which were unused to weeping. The result of that was: "How much money do you want, name the amount?" and the difficulty with us was to persuade them not to give too much, and from that day to this we have never asked the State of Minnesota for an appropriation to carry on not only build-

ings, but the current expenses of that institution, but what it has been freely and gracefully granted by them. [Applause.]

THE CHAIRMAN: We will now hear from Dr. Isaac L. Peet, a great educator, and one of the oldest in this work.

DR. PEET: Mr. President, ladies and gentlemen, fellow workers in a great cause: I feel that my chief claim to being called upon upon this occasion, is the special relation I hold to the Principal of this institution, who, for many years, was associated with me in the instruction of the deaf and dumb in the City of New York. When he first came to the institution, I had been in the work fifteen years. He, at that time, was a recent graduate of Union College. He was recommended to my father, who was then the Principal of the New York institution, by one of the best educators of the deaf and dumb we have ever had in this country, Mr. David D. Bartlett. To look at Mr. Bartlett and then to look upon Mr. Wilkinson, you would say that the same blood must run in their veins, and so it did. Mr. Bartlett conferred a great favor upon the cause of deaf mute education when he recommended Mr. Wilkinson to the New York institution, without the knowledge, on Mr. Wilkinson's part, and with the rare insight which Mr. Bartlett brought to the benefit of our cause. For ten years Mr. Wilkinson was associated with me in the New York institution. He acquired the language of signs in a remarkably short time; he was full of enthusiasm, full of devotion to his work, and manifested every quality which makes an admirable teacher of the deaf and dumb, or in fact, an admirable teacher of any one. He had also in his veins the blood of that celebrated educator, Mr. Charles Bartlett, who founded the Collegiate Institute, at Poughkeepsie, New York, where he had his preparatory education, and many of those methods which he has introduced into the management of this institution.

Mr. Wilkinson gained the affection of every one connected with the New York institution. We all loved him, and I never had a severer blow than when we were obliged to part with him, to send him to the Pacific Coast, to the great State of California. But we felt that we ought not to keep him when you needed him. I will state, also, in connection with his residence in New York, that while he was there, his literary qualities were acknowledged on every hand; he was a frequent contributor to our best magazines and papers; he was a member of that very exclusive club, the New York Century Club, which receives none but men of the highest intellectual position; and he was a friend of artists and of men of letters. He was not merely a teacher in our institution, but he was a member of the great fraternity of the most prominent literary men of the City of New York.

Such a man it was hard for us to part with; such a man we are glad that you have been able to secure, if we must lose him, and I congratulate this institution upon having secured his services, and I congratulate him upon the manner in which he has been sustained by the appreciative people of this great and glorious State. [Applause.]

THE CHAIRMAN: We would like to hear from Professor Kellogg, of the University.

PROFESSOR MARTIN KELLOGG, of California: I am very glad as a citizen of Berkeley, to welcome here, what we see present to-day. We of the University call ourselves pioneers in Berkeley. We came to

Berkeley and put up some large buildings, as it seemed to many of our friends, prematurely, but you learn to-day that we were not the first of its pioneers in education in this pleasant town; that this institution was planted before the State University. And so we gracefully yield precedence, and acknowledge that this institution for the deaf and dumb carries off the pioneer honors of our town. It is a town of educational privileges, and, in behalf of the University, I am glad to say that we have always recognized this as a sister institution.

There is, possibly, a little danger that some of the educators will forget, not that there is a charitable side of education, but that there is a side which looks to the beneficent as well as to the useful. I fully coincide with the speakers who have preceded me, that it is not necessary to consider work carried on in these walls as charitable work. I know that the opportunities here given are for the sake of giving a fair chance to those who seem by nature to have been denied their chance, and in the University, I take it, the opportunity to be given is that every boy and every girl who comes from the schools to us—for we take in girls as well as boys in the State University—should have a fair chance for the higher education. Here we are brought back to the fact that there is a beneficent side to education. For those who come here to educate these boys and girls, who by nature have been deprived of a part of our privileges, they certainly are called constantly to remember that there is a beneficent side of their work. And as we look upon their work, as we see their devotion, we feel that it calls for something more than mere business capacity, something more than mere shrewdness and a desire to get on in the world; that it calls rather for a benevolence of heart and disposition; that it calls for a willingness, if need be, to make sacrifices for the young and unfortunate; it calls for a lofty patriotism that would do something for the State in which you live, that would make those who are to be our successors better men and better women than those who are now upon the stage.

I say there is this side of education. And we are reminded, as we see these educators, as we see those who have come so far to confer about their work, who take such a lively interest in the work, and are ready to do so much for the benefit of those to whom nature has denied something; as we look upon this assemblage, we are reminded that education has its beneficent side; that the children may be taught signs is not the only thing. The object is not simply that men may go forth and make their living in the world that Dr. John Le Conte and Dr. Joseph Le Conte, *par nobile fratrum*, dwell here among us [great applause]; that they teach the sciences in the walls of our University. No such motive, certainly, actuates the distinguished professor who is the incumbent of the Mills' chair of moral and mental philosophy. He holds aloft a banner that is above all mere utility, above all that has to do only with the present, spurns this dull earth on which we tread, and would help us all to remember that we are to ascend to higher regions; that we are descendants of the skies, and that thither we shall return.

I welcome all of this assemblage to-day to this educational town, and I may, perhaps, in the absence of the official head of the institution of which I am a part, and who might speak more fitting words of welcome to-day, extend to you an invitation while you are here to walk through the grounds of the University, and on some afternoon,

that you will find the library and art gallery open to your inspection, Monday, Wednesday, and Friday afternoons, and the buildings open, and also the collections in some other buildings. It is our vacation now, and most of the Faculty are scattered hither and thither, but we have some representatives here to-day, and if you desire to know how a professor of a University looks, do not look at me, but look at them. They, I am sure, will be glad to see you at the University, and let you know that we all feel an interest in our young State, that we all cherish these institutions, not only the one with which we are specially connected, but all of these institutions; and I believe we cherish them from high motives. We are not working simply to pass our lives there and get through with it, and "shuffle off this mortal coil" and be done with the world which so many seem now to despise, but we are trying to lay foundations on which, in the future, shall be built a noble edifice of education and of moral training that shall send its influence, not over this State only, but across the borders and out over the ocean, to all parts of the earth, that we may all help to do a little to make the world brighter and better for our being in it.

Ladies and gentlemen, glad as I am to see your faces to-day, I am filled with sorrow as I remember one face that is not here, a relative by marriage, whom we had hoped to greet upon this occasion and to entertain at our home. I know that some hearts here have sorrow over the untimely death of Richard Salter Storrs, of Hartford; and there is a near relative of his here to-day, from whom I wish we could hear—Rev. Henry M. Storrs, of New Jersey.

REV. DR. HENRY M. STORRS: Mr. President, ladies and gentlemen: I had arisen to leave the hall to take the carriage to go back to the city, and am under obligations to do so, to meet an engagement there. An occasion like this must arouse in the mind of any man occupied in public affairs, or connected with public institutions, the most generous sentiments, the highest appreciation. I did not know that this body was to assemble while I was upon the coast.

The reference to the lamented gentleman, a near relative, which has been made, touches chords of special sympathy, when I remember the long years of his constant devotion, and regarding those years as a sacrifice, that was fitly closed, in some sense, by the death that was the commencement, as we all understand, of a more splendid career beyond. You who are engaged in the same noble service, giving eyes to the blind, ears to the deaf, and tongues to the dumb, can record your names with his on the generous roll of service to man. You follow the grandest service of a man who passed through sacrifice and early death on his great career, and while we stand amidst the wrecks of men, to lift up those who are bowed down, we are strengthened by the thought that underneath all of our labor there is a mightier strength than ours, a more persistent will than ours, and that the sacrifices we make, and what we do, shall be taken up and borne forward through the illimitable ages before us, ripening on into grander things. We bear life, not as a sacrifice, but as a generous gift. Let us so carry it that when, by and by, blindness and deafness and dumbness shall all disappear, every eye see, every ear listen, and every tongue speak, we shall strike in with that general acclaim of praise that will be the song of the universe forever. I thank you for this generous hour which I have enjoyed in companionship with you; I thank you for this quiet listening; I thank you for your noble service to my race, our race, God's race on earth. [Applause.]

THE CHAIRMAN: I know you would not consider our exercises this afternoon complete if I should fail to call upon the President of the National Deaf Mute College, President Gallaudet, for a few remarks. [Applause.]

DR. GALLAUDET: Your Excellency, and President of the Board of Directors: At the beginning of the exercises this afternoon, my good friend, the President of the convention, spoke to me with signs, in this way [showing]; and I spoke to him thus [showing]; which, translated into a loud whisper, was: "Gallaudet, I want you to say something in a little while." I replied: "No, no, no; there is no use; there is no necessity for it." But the President has a way of insisting upon things, and of commanding people, that is very hard to get away from; and yet, sometimes, he puts people in an awful fix. If he had called me up about ten minutes after he gave me that warning, perhaps I should have been all right. I had a little speech turned over in my mind and worked a little into shape; but they have stolen it all away. My thunder is stolen. The climate of California, they have been all over that; the magnificence of the welcome has all been attended to. There is a great deal of feeling left; but there is not much more to say about it. I feel much like everybody else; but they have all said it for me, and left me nothing to say in my own behalf. My good friend, Mr. Wilkinson, he has been carried up, up, up, until I really cannot reach him. [Applause.] I am very fond of Mr. Wilkinson; and I had it all fixed to get a nice thing on him myself, but it was all taken away from me; it was all gone. Then I thought I should fall back upon a funny story; but, Mr. President, who can stand here and tell a funny story after those noble words that have just come to us from lips and brain that seem well nigh inspired. No, sir; I must preserve my funny story for another occasion; for the greeting of Dr. Storrs touches a chord that rings deeply in my own breast; and the words that I may say, and must say, I would be false to myself if I did not say more words to add in commendation and in the most fervent admiration for that man Richard Salter Storrs, who stood by my side, Mr. President, when the arduous duty was laid upon my young shoulders to organize the National Deaf Mute College at Washington. Who, but Richard Salter Storrs, stood by me as the first professor in that college at Washington, giving me the benefit of his broad and deep scholarship, his warm friendship, and his entire devotion to the cause of deaf mute education in its highest phase, to which he gave himself enthusiastically, until health gave way. And I can only say, Mr. President, that we who come here and accept these gracious welcomes from our friends, come and stand side by side with them who have reared this magnificent State, clothed in all its material prosperity, we come and stand with them on a higher plane than any that brings us to think of climate, or of welcome, or of comfort, or of enjoyment; we stand together, Mr. President, your Excellency, and Mr. President of the Board of Management of this institution, as men and women with a purpose in heart, with those who have a cause in which to labor, and for which, if need be, to shorten life by effort which tires the brain, and wearies the heart, and even sometimes paralyzes the hand. To this calling, which we here feel it no shame to say we dedicate our lives, we devote ourselves anew, and freshly inspired, your Excellency, by this noble greeting we have received here, to go forward

and do nobler and better things in the future for the cause of humanity, for the cause of education, than it has been permitted us to do in the past. [Applause.]

THE CHAIRMAN: We will now proceed with the order of exercises of the afternoon in the way of business. Is the report of the Business Committee ready?

MR. CROUTER, of Pennsylvania: It has been suggested that instead of the paper which was to have been read this afternoon, and which will be postponed until a later day, to be read in connection with a similar paper, that Mr. I. N. Tate, of Missouri, read a paper upon "How Can We Secure Better Schools for the Deaf?" to be followed, if there is time, by a paper by Mr. Jenkins, of New Jersey, upon "Aphasia in Reference to Deafness."

MR. I. N. TATE, of Missouri, then read the following paper:

HOW CAN WE SECURE A BETTER ATTENDANCE UPON SCHOOLS FOR THE DEAF.

It is a fact greatly to be lamented, that such a large number of deaf mute children are growing up entirely uneducated. It is said that at least one half of these "children of silence" are permitted to remain in the densest ignorance. There must be some cause for this; in fact, there are a number of causes.

It is universally admitted that there must be special methods used in order to educate the deaf; that they cannot be taught in the public schools of our country; that uneducated they are not self supporting; consequently, schools for the deaf are a necessity.

Of the many reasons why parents do not place their children in school, we will name a few:

First—The tender and yearning love of a parent for an afflicted child, so predominates that it overrides the judgment. The thought of separation is so painful to both, that in mistaken kindness, the child is kept at home.

Second—There is a lack of appreciation of the imperative need of the child. The depth of its ignorance is not fathomed. Most wonderful is the intuition of a father or mother. How often have we seen them translate the rude sounds and awkward gestures, or even the profound quiet of the child into thoughts that would do honor to the most gifted and cultivated mind!

Third—There is criminal ignorance of the advantages afforded by schools for the deaf, and sometimes even ignorance of the existence of such schools.

Fourth—Sometimes the child is kept at home that the selfish parent may have the benefit of his labor—claiming that it is necessary to the support of the family.

Fifth—A large class of pupils are supposed to obtain a sufficient education in one, two, or three years, and are then left to get along through life as best they may. The State's money is squandered on such pupils, and they derive but little benefit from the school. The average number of years each pupil attends our schools is surprisingly small. In Missouri, it is scarcely five years, and, we presume, but little better elsewhere.

How can knowledge of the school be disseminated most effectually? The names and addresses of one hundred and seventy-five children not in school in Missouri were learned by means of postal cards

addressed to Postmasters. To parents of these children circulars of information were sent. Newspaper advertisement is expensive, and besides, the very people we want to reach do not read the papers.

To remedy the willful ignorance and criminal negligence on the part of the parents of the deaf we would suggest a compulsory school law. We are aware that this subject, as pertains to the public schools of our country, has been worn threadbare by discussion, and it is said to admit of about equally strong arguments on both sides. Neither are we ignorant of the fact that one of the most formidable obstacles to the enactment of a compulsory school law in this country is the feeling of repulsion that arises in the heart of an American at the very thought of compulsion, no matter how derelict we may be in the discharge of obligations to our fellow-men or to our children.

In arguing this question we will consider the schools for the deaf as part of the public school system of the country, and hence all arguments favoring compulsion of attendance on the part of hearing children will be shown to gain added force when applied to the deaf. Is it not true that the States have in the past made sufficient appropriations for the support of schools for the deaf? Is it not true that more than half the deaf children of the United States are allowed to remain in ignorance? Alas, how dense and dark the cloud that settles upon the mind of the uneducated deaf mute.

It is claimed that a compulsory law is opposed to free American institutions. We would ask whether we Americans are not born under law? Is not taxation to support schools compulsory? Is the one more unjust or oppressive than the other, and does not the law compelling men to submit to taxation to support schools suggest the law requiring attendance upon them, that their benefits may not be wasted?

It is a well known fact that those who do not utilize the means provided for the education of their children, pay the least tax, and being, as a rule, illiterate, are wholly unable to educate their own children. There seems to be in the heart an inborn opposition, and even an actual hatred, towards any law or institution that presumes to step between the parent and the child.

Now, suppose a neighbor's child were being injured bodily by an infuriated parent. Would a community sit quietly by and allow this? When the deaf mute child is left in ignorance, not through malice, but on account of lack of information of those who love it, should there not be laws enlightening such ignorance as this? The result of the injury in the one case is bodily, and hence temporal; in the other it is mental and moral, hence eternal.

Compulsion should not be the foremost thought in the compulsory law. The leading thought is to enlighten and to lead in the path of duty. So of all laws dictated by an enlightened judgment they are but Christianized, condensed rules for the guidance of men. It may be argued that as prohibition in liquor does not prohibit, so compulsory school law does not compel. We admit that it would take time to successfully enforce such a law. The obstacles to be overcome in enforcing prohibitory laws in the liquor traffic do not exist in enforcing compulsory school laws. Men are goaded to violate the one by an unconquerable thirst for drink; they would be tempted to violate the other by an unenlightened selfishness. Did they see the matter in its proper light their tender love for the afflicted child would inspire them to do or to suffer anything that duty pointed out.

It may be said that while this would be a good law we are not ready for it. I would answer that we were not ready for many of the best inventions that have distinguished our age. Many of the wiser ones were not ready for the inauguration of the Sabbath schools, nor for the Young Men's Christian Association work of our country.

It may be asked why we instructors, teachers of deaf mutes, are discussing a compulsory school law for the deaf. We would answer, that while we are not lawmakers, we are in a position to know what laws are best suited to the deaf, and we feel certain that the matter only needs to be presented to be acted upon.

We have not attempted in this paper to enlarge upon any thought presented, but hope the convention will see fit to take the subject up and discuss it fully.

THE CHAIRMAN: This is the only paper upon this peculiar subject which will be presented to the convention. Will you discuss this paper now?

REV. DR. THOS. GALLAUDET, of New York: The question seems to be, how are we going to aid these deaf children to get an education? While I think that something might be accomplished by a well devised compulsory law, I will venture to give a history of the institutions of the State of New York, to show that, although circumstances may differ in other States, the time has come when those who lead in the education of deaf mutes should open the way for other institutions. It is very natural to concentrate upon one point, and for many years in a State it is not essential that another point be established. The experience of the last ten years in New York shows that by judiciously multiplying institutions we have brought under instruction several hundred more pupils. The old New York institution had the field at first—I forget the order in which they came—but two or three others were established, one at Buffalo; and it was supposed that those were sufficient. There came a movement to establish one at Rome. That has now, I think, one hundred and forty or one hundred and fifty pupils. Then, soon after that, came the movement to Rochester, and that was thought to be entirely wide of the mark, as enough pupils could not be obtained there to make it an institution. They have now, I think, about one hundred and fifty. Then at last there was a portion of the State left out of the reach of the ordinary means of travel, away off in Franklin County, in the northern part. Two years ago it was thought expedient by some gentlemen of that part of the State to assert a claim that a school be there established; and at the end of two years, so established, had forty-five pupils, with the expectation of having sixty at the beginning of the next term. But there is a singular fact with regard to this last school, and that is, that the majority of the pupils there, the young men, are over eighteen years of age. I visited it only about five or six weeks ago, and saw the results of the training. Men who had grown up in ignorance, twenty, twenty-two, and twenty-four years of age—you could see the results of training, even in their physical condition, in the way in which they looked and carried themselves. I saw them when they began some two years ago. So it seems to me that, instead of expecting to gather in all of the deaf mutes from every part of a large State, by compelling their parents to send them there at great expense—parents, many of whom do not appreciate the education—it would be better to bring the school within a reasonable distance, and to make it known to every one that there is a school for deaf mutes

only a little way off that they can reach in a few hours; that if the child is sick they can go and take it home; thus seeming to bring the education to the doors of many families.

I only say this to show what has been accomplished in New York. I do not know that the circumstances are the same in all other States; but I do ask the educators of the different States to be careful upon this great question, so that, if it is necessary for another institution to be formed in another part of the State, it shall be conducted by those who have had experience and an interest in the matter, and not left to some new, enterprising person who will have to get experience before he reaches the point of efficiency and success.

I believe this is a practical question that we must all meet; and if the time has come, let us, rather than hold back, press forward gracefully; ask the State to look around and see where a second institution can be formed, so that we can take another step towards bringing all our deaf mute children under education.

MR. NOYES: What per cent of the uneducated children of New York are in schools?

REV. THOS. GALLAUDET: I am not prepared to give figures. I am only stating the history of the last ten years. The great proportion of those who are evidently now in these institutions would not have been sent to the institution in New York City.

MR. BROOKS, of New York: I am very sorry to differ from my friend in regard to the multiplicity of institutions. I believe in one good institution in a State, according to the size of the State, but in such a State as New York, with five and a half millions to-day, it may make a difference whether you have one or more. We have seven in that State. My observation and experience lead me to the conclusion that we have too many educational institutions in this country. We have in several of the States twenty colleges, and a consequence of having so many is that but one or two of them are at all fitted for the work designed. It is better to have an institution like Oxford or Cambridge in England where there is a University and it may be twenty colleges in connection with that University, where every department, every kind of learning is taught in one of those institutions. You have a great many institutions in the State of Ohio; and we have them all over the country. They are petitioning continually for material aid to execute that which was not well done because there are not the means of doing it well. I dissent from my friend altogether in regard to the school which he has cited. He went before the Legislature and persuaded them that it was essential in the interests of the deaf and dumb to have a seventh institution in the State. What was the consequence? A loss of a great number of pupils, or a number of pupils in our own large institution where the education was much more complete, where a child could be taken at the age of six and prepared, if need be, for the college of my friend in Washington; a complete education in every preparatory department of learning.

You establish several institutions in the State according to the desire of a member of the Legislature to have one in his district, and of petitioners to have one in their district, and, as a consequence, the members of the Legislature—and I speak from experience—consent, to gratify the member from St. Lawrence or the member from Monroe, or the member, it may be, from some other district, Erie County or

elsewhere; and you so multiply institutions that you take the vitality out of the institutions already in existence very often.

My friend says there is an advantage in having the institution near to the neighborhood of the deaf mutes, so that you may get them in the county institutions where you could not get them in the State institutions. That is possibly true. But if you will exert the same power and the same influence to make your one, two, or three institutions complete in a great State, you will accomplish infinitely more in the education of the deaf and dumb, which is the principal thing desired, than if you have a dozen weak institutions in different parts of the State. Such a mode of education would commend itself to my judgment much more, and to those who study this subject and look at it in all of its consequences from the beginning to the end.

We have in the great institution of New York, which I represent, in part, the means of educating five hundred children. At one time we have had five hundred and fifty. You take them from this institution, and put them somewhere where, of necessity, from want of experience, and want of proper professors, you weaken the great institution and do not at all strengthen the weaker ones.

I will refer to the institution of Illinois, presided over by the presiding officer of this convention. It is the great institution in the State. It is the largest in numbers in the country, and, perhaps, in the world. What would be the effect of establishing in the great State of Illinois two or three institutions there? It would, almost of necessity, weaken the one there without benefiting any of the others.

What is wanted to reach what my friend, Rev. Dr. Gallaudet, most desires, is a larger interest by the people generally who are interested in deaf and dumb education, by bringing them to the main institution and educating them there.

Now, as a question of economy, what is gained by this frittering or drawing away from the great central institution by minor institutions elsewhere? What do you gain by it at last, saving a little travel in these days of rapid transit from one end of the State to the other? You give them a comparatively inefficient education. It is impossible for them to have all the means in these new institutions which they have in the larger ones. And hence, in my judgment, it is a mistake to multiply your institutions except in cases of absolute necessity growing out of their large extension of territory. [Applause.]

REV. T. H. GALLAUDET: I do not intend to discuss the question. I think there is great force in all of the remarks of my friend, Mr. Brooks. The only point of my friend is, that experience has taught that it is impossible to get all of the deaf mutes of the State into one institution. But, taking these institutions that have been formed, and they average very well with all institutions commenced. They have good teachers. I have looked into them all, and their progress is the same as in the old institutions. I appreciate very much what Mr. Brooks has said about the advantages of concentration. But there are a great many people in a large State who will not send their children two, three, or four hundred miles away. Many of them will; but many of them will not. I fear very much that, if we make searching inquiries into all of our large States now, we shall find a great many deaf mutes left out, notwithstanding these wonderful advantages which are offered them. It is a serious question, and I do not press it as one of present vital importance. It is very apparent that we cannot expect to educate all of the deaf mutes of a large

State in one institution. And I shall ask my friends who have had experience, and know how to go to the Legislature, that when the time comes for a second institution, to take the lead, and make it just as the parent institution. That is my point.

MR. MATHISON in the chair.

MR. C. W. ELY: I agree in part with both the gentlemen who have spoken. I do not doubt that increasing the number of institutions, in other words the bringing of the institutions a little nearer to their homes, will in many cases secure the attendance of a child that will otherwise lose the benefit of an education. I think it cannot be questioned that a central institution, with its larger equipment and with its better facilities for classification, can afford advantages that cannot be secured in a small institution. But before this question passes I desire to call attention to a subject which has not been touched upon by either of the gentlemen who have spoken, and that is this, that the multiplication of institutions, even with the bringing of the schools nearer to the homes of the children, even bringing them near enough to be reached in half a day's walk, you cannot always secure the attendance of the child. And here is again a difficulty which presents itself to us, how can we so interest the public that they shall make it their business to see that the deaf mute children who are growing up in their communities are secured the privilege of an education which the State promises them. I presume it is in the experience of the head of every institution in the country that there are children living within easy reach of them who do not come into school and whom they cannot get into school. It has been my experience, and I presume there is another experience which many have had along with me, and that is this: There is a small town in some distant portion of this State, perhaps in a portion near to the school, and you happen to have a scholar from that town in your school, and you ask some gentleman who knows all about the public schools and interests of the community, something about that family, and you discover that he does not know that there is such a child in that family. He knows the family, the mother and the father, and he has seen some of the children possibly in the public school; but he never heard, until you told him, that that family had a deaf mute child in it. Here is a fact that meets us; that we have not yet secured such an interest in the community, in the public at large, that they take this question home to themselves, that they take an interest in these children that have been deprived of some of the blessings which we enjoy.

Now, the question arises, are there any means which we have not tried which will bring home to the conscientiousness of the people and to their realization the fact that there is such a considerable number of children growing up deprived of the blessings of hearing and of speech. We try many expedients, and I hope that here in communication with each other we shall be able to learn from each other some expedient that has been found efficient in securing this end which some of us at least have not yet discovered. [Applause.]

MR. F. D. CLARK, of Arkansas: The Principal of the Rhode Island school requests me to say that even in that little State where there is only one institution, they are unable to get more than one fourth of the children in school. Would the gentleman who recommends a division of schools want a new one there in that case?

DR. PEET, of New York: Allusion was made in some remarks in

respect to the method of influencing Legislatures to sustain an institution, which has a bearing upon this matter of inducing the parents of deaf mutes to send their children to school; to bring proof before the people, enabling them to see it.

I remember that in the year 1844 my father went through the State of New York, taking the stage coaches which then prevailed, and visited town after town with a delegation of pupils from the institution. The result was a marvelous increase in the interest felt in the education of the deaf and dumb. People would see that such results would be accomplished. But throughout every county thus visited went an interest which had never existed before in the education of the deaf and dumb. The result was that in the succeeding fall there was an increase of seventy-five students.

In former times when the laws of the State of New York had not been formulated so perfectly as now, and when the policy of the State was not absolutely fixed, it was necessary, in order to interest the Legislature of the State, to hold exhibitions before them. And the result of every such exhibition was, not only the acquisition of additional means for carrying forward the institution, but a large increase in the number of pupils. And we find now that in order to keep up our numbers it is necessary to give, not only the annual exhibitions at that portion of the State where our institution is situated, but also to give an additional exhibition in some central part of the State, to awaken and keep up the interest established in behalf of the deaf and dumb. There is nothing like demonstration. I believe that exhibitions of the advancement of which deaf mutes are capable are the very best means of increasing this interest, and are the best means of increasing the number of pupils taught. [Applause.]

MR. WILLIAMS, of Connecticut: I agree with Dr. Peet that exhibitions are very useful in their way in awakening an interest in this subject. But I believe there is another thing which serves an exceedingly useful purpose here, as it does in other work. We know that buttonhole work is a most effectual sort of work, and that we must work upon individual cases if we are going to work surely and effectually. I have had a little experience in looking up pupils, which has been somewhat successful, which was conducted in this way: I found out from the census list that there was in New York a very large number of deaf mutes who were at school nowhere. And I tried to get at them, and had some success in this way: I got hold of a Congregational or Baptist year book, and wherever I could locate an uneducated mute in any town I wrote a personal letter to the minister located there, if I could find one; but if there was no minister to be found, then I addressed it to either the First Selectman of the town or the Chairman of the School Committee, or some person whom I thought would take an interest in the matter as a matter of Christian benevolence; and I gave him the name of the parents and the name of the child, and the age of the child, stating the opportunities that there were to give that child an education, and asked him as a matter of Christian benevolence to put the matter that I gave him into the hands of the parents, if they were people who would follow it up, or if they were those who would do or care nothing about it, that they would individually take the matter in hand and press it forward, and use all the influence that they possessed to bring these children to school. And in that manner, by individual work, I have succeeded

in reaching a great many pupils that would not have been reached in any other way. [Applause.]

DR. GALLAUDET, of Washington: I do not intend to detain the convention, or those who are doing us honor by their presence to-day, by any extended remarks; but, I would like, in this connection, simply to allude to a paper, the contents of which I am familiar with, which is to be presented to the convention. And I do this because I feel sure there are some persons with us to-day whose influence in the community at large, which is very valuable, and who might be glad to have this suggestion made.

The paper, which is to be presented to the convention, shows, at some length, the reasons why it would be very desirable, on grounds other than those that pertain to the education of the deaf, to introduce the instruction of the manual alphabet into the common schools. If that were done, the means would be in operation, the tendency of which would be to increase attendance of deaf mutes upon the schools for the deaf. If every hearing child in every community in the State were taught to use the manual alphabet, and knew that it was the alphabet of the deaf, we would have a great army of little people interested in their companions who are known to be deaf, and made aware that the education of such were possible. In this way the attendance upon the institutions for the deaf would be increased, and the object aimed at by the paper, which has been read this afternoon, be advanced in the community.

I merely anticipate very briefly the suggestion of the paper which is to come before the convention, and would say to those who are present to-day to bring away with them, in their minds, this suggestion, that possibly it may be well, in the multitude of things that are taught to our children in the common schools, to add this instruction, which can be accomplished in a very short time, so that all may know the alphabet of the deaf, and so become interested in the deaf, and help to bring them into the schools, or be able to communicate with them after they have come out of the schools, or with those who are not so fortunate as to speak or read by the lips. [Applause.]

MR. NOYES, of Minnesota: I understand that the paper which has been presented has for its object the securing of some of the best methods of spreading information concerning these schools for the deaf, and thereby securing the attendance of the uneducated deaf.

During the last twenty years I have had a little experience in this line, and have been to a considerable degree successful; and I desire to make two or three suggestions. Nearly all of our States have their departments of education so organized that there is one head, represented most commonly by the Superintendent of Public Instruction. That Superintendent of Public Instruction in carrying out his official duties is required to send blanks into all of the school districts of the entire State, that he may make returns and statistical reports from time to time. The most of you are aware that children in a neighborhood know the other children of the neighborhood better than the adults do. In other words a child in the public school will know if there is a deaf and dumb child in the neighborhood sooner than his father or his mother. In perhaps nine cases out of ten he will know there is such a child when his father would not know it. I could illustrate that by numerous examples.

In our State the Superintendent of Public Instruction, after consultation with me, embodied in his school blanks sent from his office

into every district in the State, a table in which the Superintendents of the county or of the schools were required to report to the Superintendent of Public Instruction the name of each deaf or blind child, and give his age, and the name of his father and his Post Office address. These blanks were specially prepared, and were required to be filled out and returned to the Superintendent's office. When those reports were all in he kindly tabulated the names, the ages, and the Post Office addresses of all these children, and forwarded them to my office. That method alone has given me tenfold more reliable information in the State of Minnesota than all the census returns that have been made either by the National or the State Government since that institution was founded. More thorough, complete, and reliable information has come in that way than by any of the census reports.

I would suggest, however, right here, as the result of my experience, in order to save mistakes that I would have the children recorded as deaf, and say nothing about their being dumb, because some parties get the deaf and the dumb and the blind mixed up and make the same child deaf, dumb, and blind when no such case ever occurred in our State. I would recommend that there be a statute making it a part of the duty of the County Superintendent that when he makes his returns to the State officers in order to receive his apportionment of the State money for educational purposes, he should embody these statistics concerning the uneducated deaf and the blind, in his report.

One other point. A few years ago I prepared very carefully a brief statement concerning the institution, the work and the nature of the school, the kind of education, industrial and so forth, and embodied it in the form of a little leaflet that you can put into an ordinary six inch envelope; and in almost every letter that went out of my office for the parents, or into any part of the State I inclosed one of these printed leaflets, printed in our own printing office by the deaf. I print from one thousand to one thousand five hundred a year, just as I feel I need them, and I scatter these broadcast through the State, taking pains to send them to the teachers and County Superintendents and other State officials. In this leaflet is a picture of the institution, the alphabet we use, the general regulations, course of study, and so forth. This has been of real service in spreading information concerning the school.

There is one other point I want to impress upon all of my associates throughout the country, that these are emphatically institutions supported by money that comes from the public treasury; and that every official head of the institutions should make it a special point to invite the public—I was going to say—whether Monday morning early or late Saturday night; let it be understood that the institution is open to any citizen or friend who desires to make inquiries about the school. I know that some confine it to Friday afternoons, or Thursday afternoons. But I assure you that an institution that is always open to its visitors, showing the working of the school, that five minutes of such attention will impress a visitor more than five columns carefully written in a newspaper. Let them come in and see the school. It may be they will discommode you sometimes. If persons are allowed to walk about the grounds for five or fifteen minutes, and are shown the school-rooms, those visitors go away and if they meet a deaf and dumb child, ten chances to one they will tell him what they have seen and know. Let it be understood that the public has that privilege; that they may come and will be courteously

received, although they may sometimes put very queer questions. Nevertheless, it is a public institution, and they should receive most polite attention.

Those three sources have helped me in my work more than I can properly estimate. I ask any officer who is at the head of any school for the deaf, to try this for a few years and see what is the result. In our State it has brought seventy-five per cent of the deaf and dumb under instruction.

MR. WILKINSON: Did you ever know an institution where they were not received with all of that courtesy which you speak of?

MR. NOYES: I have the names of institutions in my mind in which notices are put up on the doors: "Closed for repairs," etc. We say to all, "Come in."

DR. PEET: I am sitting by the side of a gentlemen who has addressed us eloquently this afternoon, explaining the interest which he had felt when a member of the Senate of the State of California, in the cause of deaf mute institutions, and he has made a suggestion which seems to me novel, important, and interesting, and I will be very glad if you will call upon Senator Whitney to make that suggestion to our convention.

THE CHAIRMAN: Will Senator Whitney please address the convention.

SENATOR WHITNEY: Mr. Chairman, the suggestion which I made, as a temporary thought that came to me, was this: Of course these institutions are public institutions, like our public schools, for the purpose of giving the blessing and benefit of education to all the children of the State. I should judge, from what I have heard this afternoon, that the difficulty is not to ascertain and locate the places of residence of deaf mutes in any State, for by means of the United States census, and the school census, and things of that sort, it may always be ascertained what proportion of deaf mutes exists in every community, and I dare say they are almost always located. The difficulty then is, not in ascertaining where the recipients of the benefits of these institutions are to be found, but it is in getting them into the institutions themselves. How, then, can the State better do this work than by having connected with its public school department one person under the employ and pay of the State, whose duty it shall be to visit these children at their homes, in their families; visit their parents, and lay before them the great benefits which could be received by them by coming to these institutions?

Why could you not in that way overcome the disinclination of a fond mother to be parted from her daughter or son, by showing her that the child would receive greater attention, greater care, and would be infinitely benefited at an institution of this class. One person so employed could visit a large number of homes, and, it seems to me, could bring more deaf mutes within the reach of the benefits of such institutions as this than could be brought about in any other manner. Of course it implies the labor of an educated person to make those suggestions, but it does seem to me that it could be accomplished, and would be worth all of the expense that the State would thereby incur, for its feasibility might, if it should meet your approval, be easily placed before our Legislature and our Superintendent of Public Instruction, and this object secured by these means.

MR. NOYES: I like that suggestion. But if you hire a gentleman and give him a good salary, and pay his expenses, in a great many

cases these families would infer that his salary, or his income, would be so much increased by every additional pupil he got into the institution. They would be very likely to be suspicious that his plausible words and explanations were that he might make money out of it. This plan has been adopted in one of the Western States. An educated pupil who had been at the institution, and graduated, was hired to travel about the State and tell what he had experienced, what he was when he began, what training he had had there, what he had experienced in the institution, and to state to them, "Here I am just to tell you what I have learned myself," and in such cases it has worked very successfully. But if you employ an educated gentleman, or, perhaps, a politician who wants a good position, and send him about the State, you will not find the same results. They look with suspicion upon him. I have been more or less where there were deaf children, and the parents have treated me as though they thought I wanted to kidnap their child. Though I went there with the kindest of motives, they did not appreciate a particle of my interest in them. But if I had shown one of my pupils, who could tell what he had seen and how he had been benefited, and the advantages of the institution, the difference would have been very great. I have known a pupil to succeed when I have failed. [Applause.]

REV. DR. THOMAS H. GALLAUDET then offered prayer, after which the convention adjourned until to-morrow, Friday, July 16, 1886, at two o'clock P. M.

MEETING OF TEACHERS OF THE NORMAL DEPARTMENT OF THE CONVENTION.

FRIDAY, July 16, 1886.

The meeting was called to order by Mr. C. W. ELY, of Maryland, the Superintendent of the Normal Department.

Prayer was offered by Rev. W. D. MCFARLAND, of Washington Territory.

THE CHAIRMAN: The first subject to be considered is Primary Language. Mr. Weed, of Philadelphia, will conduct the exercises. The idea is to have set before us here the methods of the classroom—how we begin, how we go on, what means we use to reach the minds of our pupils to illustrate certain things, to get over certain difficulties; and in the progress of the discussion it is expected that the teachers present will ask questions, make suggestions, and offer remarks from their places in the room. It is to be as informal as is consistent with good order.

MR. GEORGE L. WEED, of Philadelphia: It is certainly a matter of regret that in the conducting of this Normal Department, so practical in all its relations to our work, we are not to have the benefit of the mature judgment, knowledge, and experience of Miss Noyes, who had been selected to conduct this section. As stated yesterday by Mr. Ely, this labor has devolved upon me almost at the last hour, and without an opportunity for such consideration and preparation as I consider essential to the best conducting of this department. I am highly favored in having the same assistants, in the persons of Miss Shrom and Miss Harris, that had been assigned to Miss Noyes.

You will notice in the circular that has been sent to the institutions by Mr. Ely, that it is not contemplated that in this section, or in these sessions of the Normal Department, extended papers shall be read. This would be entirely impracticable, as it would prevent that free discussion which is so necessary to secure the greatest benefits of this exercise.

There have been some papers placed in my hands yesterday and this morning. Those which were placed in my hands yesterday I have looked over, and have selected from them certain passages that are suggestive of the kind of work that we want to consider. The other papers will be considered in the same way. This morning all that I shall do will be to read some extracts from two of these papers, suggestive of topics that we may consider this forenoon.

I will first define what we understand to be primary instruction. This is included within the first three years of the school period. The intermediate department is also in this section, and we may consider that as including the fourth, fifth, and sixth years. Beyond that will be the higher department.

Miss Goode, of the Illinois institute, in her paper makes the following suggestions: First, in regard to action writing, she says:

When I began with my class of new pupils, last fall, I determined to teach them nothing that they would have to unlearn in future years. If they wished to describe any action or express any thought that would not be correctly written in such language as was suited to them, they were not allowed to make the attempt. I consider it a great mistake to have the same action stories written again and again until they become a mere matter of memory. The principles of language should be so well taught that the pupil will be able to apply them in any combination.

Before I began to have my pupils write stories I wrote a few very simple ones for them to memorize, and when I saw that their interest was thoroughly awakened, and their imagination called into play, I suggested that they should follow my example. With some of the pupils it was very slow and tedious work, while others made rapid progress. All improbable stories were discarded, no matter how well written. I do not believe in allowing a child to send home school-room work for a letter. If we begin in this way we shall have much trouble, as the habit will cling to him. I think that letter writing should be deferred until the pupil has been in school long enough to write news items and simple sentences, such as "I am well," "I love my mother," etc. I followed this plan with my class this year.

In the place of journals I have used what we call, in our institution, news items. When the pupils began this work they wrote just a few disconnected sentences, about things that had taken place out of school. Soon they began to write connected narratives of several sentences in length. This work is preparatory to journal writing, and prevents the pupil's adopting a set form of expression. It insures freshness and originality.

MR. WEED: The other paper is by Mr. Kiesel, of Washington, a former pupil of Mr. Crouter, in the Pennsylvania institution. I have selected a few passages from his paper, which is entitled "How to Start the Child." Mr. Kiesel says:

The grand requisite for a teacher is not knowledge, but the ability to interest his scholars, to command their attention, and make them learn willingly and eagerly what he teaches.

To teach the whole of the alphabet at first is to waste time. It is a tiresome and monotonous task, and the pupils will soon lose their interest and become careless and indifferent.

Reviewing frequently what has already been learned is an important part of the teacher's work. Cramming the pupil should be avoided. The deaf child is not expected to learn in a single school year what a hearing child has learned through the ear in six or seven years. I believe it is better to teach the child the names of things before teaching anything else.

When the class has thoroughly learned several verbs in the past tense, I teach them, from signs and pictures, to write a few sentences for each of these verbs, and also give them one or two new words for the subject of the verbs.

We should not be in a hurry to introduce new verbs, but rather show and teach the different ways the same verb can be used in connection with the names of things already taught. This is laying a foundation for the writing of original sentences. As new verbs

are introduced, be careful to employ those that are most used in every-day life, such as "slept," "laughed," "cried," etc.

I have used the following method in teaching the youngest class the use of verbs, with satisfactory results: I ignore the present tense entirely for the first few months; I use verbs of the past tense at the beginning, and when the class have learned fifty or more verbs, I bring to my aid the imperative mood.

A hearing child does not know the rules of grammar before entering school, and, in fact, for many years after. Grammar is not essential to the acquisition of a sufficient command of language to express the simple ideas of young deaf children. It is not advisable to teach the rules of grammar to the youngest class. Always teach those subjects which will interest the child and that are easily learned.

MR. WEED: Now, you will notice that a number of topics have been suggested by these two papers read, and there are other topics that I know will be presented, and so I have classified the work of this primary department under five different heads:

1. Vocabulary.
2. Tense.
3. Correction of mistakes.
4. Methods of review.
5. Exercises most profitable for primary teaching, such as writing, from actions, pictorial teaching, words incorporated into sentences, stories from signs, original stories, original writing, and letter writing.

The plan is to take these topics up in order, and, for the time being, to confine our attention strictly to the topic under discussion.

The first of these is vocabulary. And right at this point may I, as introductory to several things that I shall have occasion to say upon different days, remark that what I shall refer to, is the result of experience with a single class? I happen to have had the opportunity of experimenting, by taking a class six years ago that has been almost continuous in its identity to this date. That is, there are thirteen boys of almost the same age, that have kept together during all this time. Any one who has taught in any of our institutions, can appreciate the special advantage that this has been to both teacher and pupil; giving an opportunity for experimenting that no mixed class, or class changed from year to year, could afford. One half of this class are pupils who are either congenitally deaf, or else lost their hearing so early that they were practically so. The remainder of them had a little language before they lost their hearing, but that language had been totally lost in every case, and in several cases where language had been learned, it was the German language. So, whatever advantage a child may have from once having had its hearing, has been perceptible throughout the course; and yet, all things considered, we may take the ground that it is practically a congenital class. Yet, in the exercises that I may present as the work of that class, both in the early and in the advanced or later stage, I shall be careful to discriminate between those who were actually born deaf and those who once had their hearing, so that those who wish can take that into account.

It has been my practice, from the first day to the last, to keep a record of every new word taught, and not only to keep it myself, but to require every pupil to keep it. Each pupil has had his own vocabulary book, and when a new word has been taught it is assigned to its proper page, its proper column, and its proper line in that column; so that they have a set of books that correspond in every particular, page for page and line for line, with mine.

When a word has been taught, the pupil understands that he is ever after responsible for the use of that word. He understands that

if he misuses that at any time after it is once recorded in the book, he has made a serious mistake.

Now, you may be a little curious to know just how many words a pupil will learn the first year. As a rule I am very shy of increasing the vocabulary. I give a new word only when there is necessity for its use. When the child has a new idea, and wants a word to express it, I give him that word, and when that word is once taught and is once put on his vocabulary record, he is to use that word and no other. In other words, I entirely discard synonyms in the first two years. Why? I think if you will refer to your own experience in teaching, you will find that no small part of deaf muteisms, so called, are caused by the use of synonyms. For the first two years, and, I may say, the first three years, I would never allow the use of synonyms. The consequence is that at the end of two years the compositions by that class have been, while not perfect, such an approximation to perfection as I have never had in any other class.

Take, for instance, the idea of a child reaching a place—"Mr. Smith reached Berkeley yesterday." The boy has that idea associated with that word. He afterwards sees the expression "arrived," and he asks me what that means, and I tell him, by signs, that it means the same as "reached." If he thinks he has two words to express that idea, of course, in showing his wisdom, he would use the last word, and so he brings it in: "I reached at Berkeley yesterday." I simply ask him this question: "What did I teach you to write to express that idea?" He says, "You told me the word 'reached.'" I reply, "Then write 'reached.'" "But does not 'arrive' mean the same thing—arrived at?" In the future I will show the difference, but now, at this point, you must do just as I say, and write the word that I tell you to express the idea of "got there."

When we come to the subject of past tense, this matter may come up in another form. I have thought it might be a matter of interest to the members present to know the result of a carefully kept account of words taught within the first, second, and third year.

The first year, six hundred distinct words, no synonyms; the second year, five hundred and two more words; the third year, two hundred and forty-one more words; the fourth year, three hundred and sixty-one words; the fifth year, three hundred and ten words; the sixth year, two hundred and seven words; the aggregate being two thousand two hundred and twenty-one words.

This is not including geographical names, but it is including geographical terms. But you would be surprised, unless your attention was called to it, to learn that only thirty-eight words were essential—that is peculiar—to the study of geography. Monteith's Primary Geography they have completed by the end of the third year, so that the six hundred and thirty-nine geographical names should be added to the vocabulary of the third year, which would make the number, up to the end of the third year, nineteen hundred and eighty-one words.

I would here make a suggestion to those who might want to preserve a record of the words that they have taught. I first made a miscellaneous list; I then made a list classified alphabetically. I found, however, that even my classified list was becoming somewhat confusing, and so I took a small primary dictionary and began to mark the words taught. Unfortunately I commenced with Allison's Webster's pocket dictionary, which is exceedingly defective, as it

does not give all of the forms of the verbs; I mean the irregular forms that a child needs to learn. But Worcester's pocket dictionary is a perfect model, and might almost be taken as the book for a vocabulary for the deaf and dumb; and by simply having the word taught, you can refer to it at any time to refresh your memory.

I have occupied more time than is proper for this department in introducing the subject, and will now leave it to the convention.

A MEMBER: Do the numbers upon the board indicate all the words that the pupils had learned at the end of the year; that is, had they not learned by themselves words which are not indicated there?

MR. WEED: Yes, sir; they had picked up a great many words, but they were not allowed to use those words in composition writing. In composition writing they were limited to the words that I had taught them. And here I am reminded of the distinction which I have made between a writing vocabulary and a reading vocabulary. We may confine the pupil in his composition to the writing of the words taught, explaining to him the meaning of other words as he comes across them in reading. I will illustrate in this way the method in which history lessons have been prepared: When the pupil reaches his fifth year he has completed United States history. The last year, which is the sixth, they commence and half finish English history. It has not been the practice to explain a lesson in history by signs. The theory pursued is that the child should get the idea of the history lesson from the book. Here are two or three pages to be studied this evening, to be recited to-morrow morning. What is the preparation necessary for that study? I look over the lesson and select those words and phrases with which I know the class is not familiar, and a new word is written. If they have had a synonym for that word hitherto it is put down, and then they have the idea. Their work in the evening is, with this help of the explanation of the new words and phrases, to grasp the ideas and facts of the lesson. To-morrow morning the book they have been studying is to be discarded. I discourage the memorizing of a history lesson. What I wish them to do in the morning is to write in their own language the ideas of that lesson. Of course there are phrases that have occurred in the lesson that they will have; but those phrases must be composed of words that they have learned before. In the lesson to-morrow morning they are not to write anything but what they have had recorded in their vocabulary book or their book of phrases, so that in reading the vocabulary every help has been given them, and all of the ideas are explained either by the words which have been put into the vocabulary or in the explanation I have given by synonyms; but the composition itself must be in their own language.

MR. W. O. CONNOR: You avoid the use of synonyms. Do you teach all the meanings of a single word? For instance, take the word "reach." You give it in the sense of arriving at a place; do you teach its meaning in any other sense?

MR. WEED: I go upon the supposition that the word "reach," the first time they have occasion to use it, is in the sense of "arriving at." Perhaps next week we shall want the other meaning of the word, and then it is given, and the two meanings of the same word carried along ever after. I teach the word only when the idea calls for it. If a word has two meanings, I do not give the second meaning until I have occasion to use it.

I desire to say here that, in estimating the number of words, if the

verb is regular it is counted here as only one word; that is, the words "look" and "looked" would be counted as one word. But the words "saw," "see," and "seen" would be counted as three words, the irregular form being treated as new words.

A MEMBER: I think it would be of interest if you would explain how you teach new words as they come up, and how you impress them upon the minds of your pupils.

MR. WEED: From the beginning there has been sentence writing. The first day's work was a sentence. "A boy walked." The action was performed, and those three words given and copied and studied. The verb "walked" is the only verb taught for several days. New nouns, however, are taught every day that may be used with that one verb. "A boy walked on the floor," an enlargement of the idea, and an enlargement of the sentence, introducing a preposition, and introducing an object to the verb; and in the course of time, "A boy walked on the floor yesterday." I shall have occasion to say, when the matter comes up, that the past tense was very strictly adhered to and pursued for at least two years.

MR. CONNOR: A lady member says to me that some of her little folks come to her, and she has to take their little hands in her own and shape the letters, to begin with. How can you start them off the first thing in writing sentences?

MR. WEED: Of course I write the sentence first, plainly, and have them copy it. The formation of the letters is a separate matter from the word. Those are the first letters they learn. The alphabet was not taught before words, nor was any vocabulary taught independent of that connection.

A MEMBER: How old were they?

MR. WEED: The most of them were about ten years of age when they entered.

MISS WRIGHT: What was the average intelligence of the class; was it, or not, a picked class?

MR. WEED: That is a very fair question. The class at first consisted of thirty pupils. At the end of four months, however, there was a selection made of twenty, perhaps, of that class of thirty, and in the course of time there were changes in the class—some taken out and others put in. But I am now speaking of the thirteen who commenced together and who have kept together; and this fact of their being, on the whole, an uncommonly bright class ought to be taken into account. I would not pledge myself to secure the same results with a mixed class that have been secured with this.

A LADY MEMBER: I would like to ask how many of the class were able to read themselves when they came into the institution. Did they know their own names, and could they read when they came?

MR. WEED: Three or four of them could, but I think not more than that. Some of the congenitally deaf have been brighter than the semi-deaf, and have learned more rapidly.

THE CHAIRMAN: Do you not often find that there is more difficulty in correcting the language, even the primary language, of the semi-mutes than that of the brightest congenital mutes?

MR. WEED: Yes, sir.

A MEMBER: What is your method of teaching the alphabet?

MR. WEED: I have never taught the alphabet to such children until they have learned words, and were acquainted with all the letters of

the alphabet. I have given them the order of the letters; but at first the letters were not taught independent of the words, they were simply parts of words. I think it is better to teach words before we teach the alphabet.

A MEMBER: When do you teach your class to write their names?

MR. WEED: Very soon after they enter the institution, and I suppose the most of them would learn it in a day or two.

A LADY MEMBER: Could you read their writing the first day?

MR. WEED: Yes.

A MEMBER: Do you begin by action reading.

MR. WEED: Yes, sir; action reading, such as, "The boy walks." They get the idea of the sentence from the performance of the action.

A MEMBER: Do you have them memorize those sentences?

MR. WEED: Yes, sir. I give them different sentences with each verb. The first sentence given them was, "A boy walked." That was the only verb used for several days, perhaps a week or two; but there were new nouns given, such as, "A cow walked," and so forth—the verb retained, but the nominative being new.

A MEMBER: When do you begin to teach the present tense?

MR. WEED: After two or three years, I think, is soon enough. The first two years I confine myself very carefully to the past tense. We will come to that topic to-morrow.

MR. JOB WILLIAMS: I would like to ask about this use of a complete sentence on the very first day. It seems to me there is a multiplication of difficulties there; that is, teaching two things instead of one. A child comes to us with no knowledge of words whatsoever; he does not know the name of the chair he sits in, and does not know the name of anything about him. Now, it seems to me that if you begin with the simple idea that this thing may be represented by a written word, and the book he takes up may be represented by a single word, and he is kept on that line for several days, to get him accustomed to the idea that an object may be represented by a written word, that he has only one thing to think of. But if you give, "A boy walks," he has a compound idea instead of a simple one. There is the name of the object, and there is the name of the action. I believe it is very important to begin at the beginning; not with any process of machinery that the child sees or understands, but with something that he is going to understand, and the names of a few familiar objects. Then, after he has learned ten or a dozen nouns, teach him to put a verb with them. He sees the difference in those two kinds of words. You can tell him that that one is a noun and this one a verb, and somehow or other he absorbs the idea that there is a distinction between those two kinds of words. There is the name word and the action word, and the child at once seizes upon that idea; it is fixed clearly in his mind, and you keep him right down to that thing until, by constant use of it, he has absorbed it, without any explanation, perhaps. It seems to me that in this way he gets a clearer and better idea of the sentence than he can get in any other way.

MR. WEED: Where the verb is uniform and the noun is varied, is not it the same thing as having just the reverse of that—the verb varied and the noun uniform?

MR. WILLIAMS: No, sir; you have two things, while in the first place you have but one thing.

A MEMBER: I agree with Mr. Weed upon that point, and I think that he is following the method of nature—that children and foreign-

ers learn phrases and complete sentences as a whole before they distinguish the separate words, and that has been my experience in learning a new language. I catch the phrase as a whole, and am able to use it, before I can use the separate words.

REV. MR. MCFARLAND: There is a certain kind of mechanical learning that is received in that way, but is it true that during the first two years the average deaf mute, in attempting to use his language among his fellows, is more likely to use the noun than anything else, and are not the names of single objects, as indicated by symbols, the natural way for the deaf mute, who has no language; and is not the noun the first thing fixed upon his mind, and afterwards the action made?

A MEMBER: I formerly believed that the way to learn a language, especially for a deaf mute, was to learn it just as we would learn a foreign language, in a natural way. Foreigners learn the language by sentences, but they learn it through the ear, and not through the eye, and there is the difference, I think. I used to think just the opposite, but I have come to the conclusion that a deaf mute is a deaf mute, and is not a hearing child.

THE CHAIRMAN: The arithmetic section now has the floor. The exercises will be conducted by Mr. Booth, of Philadelphia.

MR. F. W. BOOTH, of Philadelphia, then read the following paper upon the subject of

ARITHMETIC.

Ladies and gentlemen: We are met as a section of the convention, with the special subject of Arithmetic for our consideration. That it is an important subject, will be conceded. Indeed, when we take the future material welfare of our pupils into consideration, it may not take second rank in importance as a branch of instruction even to language.

The difficulties to be met with in teaching arithmetic to deaf mutes, are many. We are here to show one another something of the methods that we employ for overcoming them. I shall present the method which I have used in my own school-room; others, if time permits, will present methods that they have used; and I have no doubt, if we give only that of our methods which we have tried and found of value, that we will be mutually profited.

If I have any fixed principle that guides me in my work of teaching arithmetic, it is this: That I shall at all times teach it as the science of *numbers*, and the art of computing them, rather than the science of figures, if there be such a science, and the art of combining them.

The method that I have used, and that I shall present, aims to avoid giving a merely mechanical skill in manipulating figures—which any drill master may give in a comparatively short time—and centers the attention and the thought of the pupil upon the numbers and the processes with numbers which figures and operations with figures were devised to represent. Figures are used—as they must be in teaching deaf mutes—but as little as possible, and throughout the course in no other than a representative capacity. Numbers and the processes with numbers are taught by the use of numbers.

Figures and operations with figures as used are but a scaffolding, aiding in the erection of the structure, which is a knowledge of numbers and their processes. Number exists as an attribute of things,

and while other attributes are more or less immediately obvious to the senses, as are color, odor, taste, size, form, and weight, number in its attributive properties is peculiarly and exceedingly abstruse. It is a conception, and is arrived at through study of relations and after repeated comparisons and judgments.

To develop the idea of numbers as an attribute of things, as also the judgment for determining numbers, the written names of numbers will be used in association with the written names of things that enter into the daily life of the pupil in the school-room and out of it. Care should be taken that the pupil does not learn the names of numbers as a mere order of words, or figures as a mere order of characters, as he undoubtedly will if they are taught in association with an order of marks or an order of manual signs. Counting should be left to a period when its purpose will be understood.

Each number should be presented as a whole, and as possessing a distinctive character and individuality. The number four may be presented as

o o
o o

and the number six as

o o o
o o o

They are presented as nearly alike as it is possible to make them, leaving the one difference that exists between them to be seen and learned as the characteristic, necessary, and universal difference. The number eight would be presented as

o o o o
o o o o

and the number nine as

o o o o o
o o o o

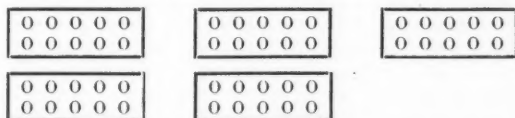
And so with all the numbers from one to ten.

It will be a great advantage to the pupil if he becomes acquainted with numbers thus in the beginning as possessing each a distinctive character and individuality, for he will the sooner perceive the relations of numbers, and become able to reason with them. He will see eight as made up of four and four, of six and two, of five and three, etc. They are the facts that give eight its distinctive character, and he will learn them as such. They may not be reasoned about or explained; they must be seen; and being seen, they may become known.

Figures, when taught, should be taught as always representing each the same number. They should be learned as absolutely trustworthy. The figure 8, no matter what its place may be, must be taught as representing the number eight—eight ones of the same denomination. The figure 1 in second place will be learned as representing one group of ten ones:

o	o	o	o	o
o	o	o	o	o

The figure 5 in second place will represent five such groups:



And so with other figures in second place. Ten such groups make a new group, and the figure 1 in third place will be taught as representing it. Two of these groups will be represented by the figure 2 in third place. By associating figures with quantities in this way they can obtain in the child's mind none other than their proper representative significance.

Other devices for illustrating our system of notation are used, the most convenient, perhaps, is the one using splints. The splints are bunched in tens; these tens in tens; and the last again in tens; so they are ready as units of any size for immediate use in making problems or illustrating them. Toy money may be used—and should be used, if it be not convenient to use real money—for the development of problems involving money. The decimal system of bunching or grading is continued, thus maintaining the trustworthiness of the figures used, in their representative capacity.

THE CHAIRMAN: Do you mean that the deaf child takes in the idea of four, five, and eight, without doing any counting?

MR. BOOTH: Yes, sir. They do not learn to do any counting in the beginning. The child must see things as a whole, at first, and afterwards analyze them. Analysis is a subsequent process. It will subsequently dawn upon him that eight is made of four and four. He will learn by using it what it is made up of.

THE CHAIRMAN: What method do you use to give the idea of number before coming to counting?

MR. BOOTH: By using the word "three," for instance, in association with objects in the room, so that he can see its application. Its meaning is developed by its use, by comparing three desks, three chairs, and so forth, simply by using the word. I do not make any attempt at explanation.

MR. GRAY: Do you spell or sign the numbers "1," "2," "3?"

MR. BOOTH: I would use my fingers to show the "3," but I would not use the deaf mute sign for "3." I do not care how the pupil gets the idea; all that I want is that he shall know the figure as representing quantity.

MR. McFARLAND: Would not the ball frame show that, without a figure, sign, or anything else?

MR. BOOTH: Yes, sir. The Chinese know arithmetic as a science, and practice it as an art, without the use of figures. If I can do anything in this connection to wipe out figures and give the idea that arithmetic is the science of numbers, and the art of computing numbers, and not the science of figures and the art of combining them, it is the work that I have set out to do; to teach numbers and not figures. My pupils use these splints upon the table to illustrate their problems.

I have other mode of illustration. The idea is to bring into association the figure and the quantity, and the quantities, in comparison with and relative to each other and to one another. I take

seven of these splints, and subtract four from them, and ask: "How many have I left?" I use these circular marks, first, and then use objects to bring out their use [showing thin, circular wooden pieces]. You may have apples brought into the school-room and divided into halves, quarters, and so forth, and in this way the problems themselves will be presented to them as real problems. I would show the apples first, and different things in the room, and then put the rings upon the board and teach the words in association with those things first, and afterwards teach figures in association with those, and also in association with signs, and have them use this as their own device, and after awhile we will use the figures in connection with these rings.

I do not teach the deaf child to write figures very much. He must write figures, because he must invent his system of notation and numeration, of necessity. Necessity, with the deaf child, is the mother of invention, and he must invent, with my help, of course, or an occasional suggestion, a system of writing figures, adding, subtracting, multiplying, and dividing. I leave him to his own devices, at first, and gradually suggest the conventional way of writing and representing numbers and processes of numbers [illustrating]. I do not care what course you adopt, just so you make figures significant of what figures really are.

Thus far we have begun teaching notation and numeration. Let them learn to count just as soon as they see the usefulness of counting, but do not begin the teaching of arithmetic with counting, because they get the mere order of signs in association with a mere order of marks, which are significant of nothing but the signs, an order of marks upon the slate.

THE CHAIRMAN: The hour having expired, the further discussion of this subject will be postponed and the subject of kindergarten work will be taken up by Mr. Westervelt, of Rochester.

MR. Z. F. WESTERVELT, of Rochester, New York: At our institution in Rochester we have had for the past eight years a department called the kindergarten. I have here a printed report of the class work done in our school for the past year. This was printed at the close of the school after the examinations, or just as the school was closing. I will endeavor to take out from it such of the work as is peculiarly kindergarten, though in our classes for little children a very large part of the time is necessarily given to language instruction that is not peculiar to kindergarten work. It is very much like what is done in older classes, with this exception perhaps, that it is all taught upon the fingers. With our young class very little work is done the first year upon the blackboard.

Our classes in the kindergarten are divided into A, B, C, D, and E—five classes. The E class, the lowest class, have had during the past year kindergarten handy work exercises. They have had the trial book. These books are made of newspapers in which pictures are pasted. The pupils have been taught to cut pictures neatly, and to paste them properly into books. These books are simply newspaper sheets twelve inches square. The books are made by the teacher but the pupils cut out the pictures and then paste them on to the pages of these newspaper books. This exercise it is understood is a means by which some skill of hands may be acquired, so that the pupils may be able to take up the more difficult exercises in time.

The lessons in sewing patchwork have been given frequently, and

all in the class have learned to thread a needle and tie a knot and sew fairly. Some few of the very little ones sew quite nicely. On certain days in the week the children have traced simple outline pictures on tracing paper. These drawings have been preserved in books, which serve as a record of progress which each of them have made.

Specimen boxes hold an important place in kindergarten work. Each child has one of these boxes [showing], and in these boxes they collect specimen objects, such as stones, seeds, and so forth. They are collected as the children go out for their walk; whatever they find being picked up by them. The child may pick up a china doll's head; a thing of beauty but it is not a natural object and he cannot put it into his collection. They are limited to natural objects. The child picks up an object and asks, "Did God make it?" And he is told "Yes," and that he holds as a treasure and puts it into his box. The practice is to collect fifty pieces the first year, while the children are in the E class. The second year they try to collect fifty objects more. It is quite easy to collect the first fifty pieces; but to collect the second fifty is much harder. Here is a list of objects which the children have collected.

They learn quickly to spell the names of these objects, and as the teacher calls for them they endeavor to get all of these things in common. They have little bags which each one makes for himself in which they collect grain. Here is a bag of wheat. The bag being made of gauze, they can see the grain through it, and they are always ready to show it.

A LADY MEMBER: How do they learn to spell them?

MR. WESTERVELT: Simply by repetition. Every time a child takes up anything he will take it to the teacher, and look at him, perhaps, to know if that can be put into the box, and the teacher will say, "Yes, God made it."

A LADY MEMBER: How does the teacher communicate with the child before it knows words?

MR. WESTERVELT: By motions or signs, or in any way to make the child understand. But the child very quickly learns to understand the spelling or the face. These children are the entering children of the school.

A MEMBER: Do they understand, "Yes, God made it?"

MR. WESTERVELT: They understand it after a fashion. They have an idea, and probably as much of an idea as any little child would have who is a year and a half old if its mother was to say the same thing to it. He might get some glimmering from the words; but a child two or three years old probably does not understand much about God, or much of the sentence that I may spell to him. But he would understand it just the same as if the teacher were to say, "God made it." A little child cannot understand about God, we do not ourselves. [Applause.] So if he get the word, the word is a sign with him, and it seems to convey an impression that clings to his mind.

MR. MCFARLAND: Do not the words mean "Put it in the box?"

MR. WESTERVELT: Yes, sir. But after a time he sees from our use of the word God that there is something else connected with that word. That he is to reverence that word, and consequently he is to value these things. And I have known a child to cry bitterly because somebody had taken a bit of fur or a piece of cotton that he had had for a long time.

A LADY MEMBER: At what age would you begin to teach the children to write?

MR. WESTERVELT: During their first year in school. But our first purpose is to teach them to recognize and spell words, and to spell them themselves.

A LADY MEMBER: Do you write the word before you teach them to spell it?

MR. WESTERVELT: No; I spell it to them first.

MR. ELY: Have you been in the practice of putting upon the wall short sentences such as would be first needed for the use of the child?

MR. WESTERVELT: We have charts in the dining-room and everywhere. They learn to recognize words as words, not as composed of so many letters; but it is simply that form that they recognize. They will go up to the board and point to that perhaps because they want to get something; and they recognize that those marks there mean the thing that they want in the closet. And they point to them, not yet being able to read or spell or write these sentences or these words upon the blackboard; but they recognize them, and know that when they point to them they get the objects they desire.

THE CHAIRMAN: On these charts do you not have complete sentences?

MR. WESTERVELT: Yes, sir; expressing various wants, like "Please give me some water."

A LADY MEMBER: Do you allow them to use any signs for "Give me some water?"

MR. WESTERVELT: Yes, we have to; but very quickly they find that this will bring it with more certainty and positiveness. If there is an entire sentence like "Please give me some water," and they can point to that, anybody will understand it; even those who do not understand signs at all. Many of our little children have learned our arbitrary sign for water, and may resort to that. But this will bring it certainly, because there is the sentence. But very soon they learn to spell. We endeavor to familiarize them with language spelled upon the fingers, all the time they are out of school.

MR. METCALF: Do you have your children collect manufactured articles, such as paper, cloth, and such things, at any time?

MR. WESTERVELT: They do that later. That would come in class A, in a more advanced division of the kindergarten, after they had acquired a more free use of language. During the latter part of the first year simple facts are taught to these boys, such as refer to the objects in the specimen box: "The coal is black." The children have learned twenty-five or thirty sentences, perhaps, about these objects in the box, and spell them very quickly.

A LADY MEMBER: How long do you keep young children, those under six years of age, in school?

MR. WESTERVELT: Five and a half hours a day. But a considerable portion of this time is spent in play, indoors and out, with their teachers and companions. No one exercise is longer than twenty minutes.

MR. FRANK: Does the teacher teach the child the signs for cow, horse, and other objects, when teaching them the objects?

MR. WESTERVELT: No, sir; the teacher does not make signs unless it is in conversation with the pupil. The last hour in the afternoon, in the first primary class, the teacher converses with the little children; and this conversation is in the child's language; and any lan-

guage, words, or pictures are used that will entertain the child. The teacher uses the child's signs, or endeavors to have the child do his own talking with his own signs; and then, when he has used the sign, and has a clear idea of it, the teacher gives him a word for it, and lets him make it. That sign is used again and again, until he learns it, and uses it for the object for which he has one sign and the teacher another and different one. He will talk with the teacher, and he will make his sign, which, perhaps, is not understood by the teacher. He will then get a picture to show what he means, and then the teacher spells the word, such as "cat," to the child, and he understands that this [spelling the word] is our sign for that animal; and, after that, he has no more difficulty in recognizing our sign. The English word is just as good a sign to him as the arbitrary sign that has been designed by teachers of the deaf.

The class next above this in grade, in special kindergarten work, have much the same work as in the class before described. They have to cut and paste the pictures into books made of white paper, instead of newspaper. Their books have manilla covers, and the pictures are more carefully selected. We send out to our friends, and ask them for illustrated papers for them to cut out, and we get advertising books.

On the first page are pasted pictures of the different articles of clothing. Following this, are pictures of tableware, tin, and ironware, and also pictures of household furniture. Each article, as the child pastes it into his book, is numbered, and upon the manilla cover is a list of the articles written. Then the teacher comes to the children, and asks them what is this? or holds up a picture to the class, and asks them the name of it. If they do not know, the name is on the cover, and they can refer to it and find out. Once a week this class has had lessons in sewing, and they have made patchwork, and fastened their thread, and sewed over and over. A training of the fingers has been accomplished by this series of exercises, in newspaper work.

They have torn a newspaper of the width of a column. For this purpose we desire to get paper of good texture, so that it will tear, and paper that is well printed, and white, so that it would be of even and uniform appearance, and for that reason we have subscribed for copies of the "Home Journal," as that is printed upon the best paper that we could find. The pupils are provided with, each, a quarter sheet of this paper; they tear it into columns, and each of the columns into squares, tearing enough to make packages of twenty-five pieces into each little bundle [showing a specimen of one of the bundles].

They are torn into squares. Now, while it looks like a very easy thing to do, if you will try it you will find it is quite a difficult thing to tear that paper into a column, and then fold it over, and cut it so as to make an exact square. The child is taught to do this neatly, and it becomes a matter of interest, because they like occupation; they enjoy doing this, and they make twenty-five of these little squares, that are exactly alike. As these are piled one upon another, they must be made of exactly the same form, and to make this little bundle of twenty-five, the child has probably torn a hundred, and some of them more.

A MEMBER: Do they count them?

MR. WESTERVELT: They do count. They do not know twenty-five, but they know how many squares there are, and they know when

they get enough. They learn that twenty-five is a large number. How they know that they have twenty-five I cannot tell you; but the teacher tells them when they have, and they know when they have. They have also torn other portions of the paper and folded it into these different forms which I exhibit here [showing]. Twenty-five of these are also tied into a small package.

The newspaper lesson we value very highly. We can see the effect of it in all succeeding work in the kindergarten. Economy is taught. Every particle of paper is saved. We consider how we can use the paper to the best advantage. They are taught that scraps and bits must be taken care of for a use that will come soon. And the paper is folded with exactness, torn carefully and neatly, and the work is done entirely with the fingers; no tools are used. This is done to teach them skill of hand. This teaches neatness and accuracy. They have had a lesson in color, and can readily discriminate between the different colors.

The class next above this in grade have represented upon cards the outlines of the curvilinear solids, using colored pictures. They have finished their newspaper lesson, and in doing so they have made lamp lighters, large squares and small squares, and have folded, torn, and cut, and learned to use the scissors.

The finishing work consists of a package of twenty-five or fifty squares folded, twenty-five each way, and two packages of lamp lighters. This is the first year's work. The lamp lighters of the C class are made of white paper, the margins of newspapers.

The class have now begun the work of weaving. They have finished the weaving shown on Card No. 1 [showing], which consists of four strands (?) of two different colors. There is supposed to be some connection, and the child is led to see some connection, between this simple form of a sphere on the back of this card and the simple colors.

Classes A and B, the more advanced classes, have woven these other mats [showing]; and this has been done in dictation.

These dictation exercises are most interesting and valuable to the children. There is hardly anything else in our school really that is more valuable in the development of the children than working under dictation. "Put this end under that and over 2 and under 2 and under 1 and over 3," and so forth, and have them obliged to obey your instructions to produce it, the form required; not being known to them until after it is brought out at the completion of the work; and if they have made mistakes and disobeyed your directions the whole work has to be taken to pieces, because they have not the same perfect form which the teacher had in mind before she began her lesson.

The class have also little books called "The Five Necessities of Life;" that is a little book made of white paper, on the first page of which they paste a picture illustrating the first necessity, that is of breathing. It shows a boy at an open window, supposed to be there to get air. The teacher then gives the child a talk upon the necessity of ventilation; that we must not be in a room that is too close.

A LADY MEMBER: How does the teacher impart that information to them?

MR. WESTERVELT: These are the A and B classes, and they are able to talk; and would have no difficulty in understanding simple sentences. I talk to them just as I would to any other little children.

One of the five necessities is illustrated on the next page—the necessity for food; being illustrated by more pictures, of which this little child has found four. [Showing.]

A MEMBER: Will you spell to us just as if we were your little children and illustrate that exercise for a moment. [Mr. Westervelt does so.]

MISS BLACK, of Rhode Island: Do you accompany that with language?

MR. WESTERVELT: These children to whom I would spell such sentences as this could speak or understand me, perhaps, if I spoke all of this, though, perhaps, not with the same certainty.

MISS BLACK: I understood that you always accompanied the sentences with the spoken language?

MR. WESTERVELT: No, not simultaneously; but we endeavor to teach the children to speak the words that they know how to spell. We do not speak and spell at the same time always.

MISS BLACK: Do you not usually, in most of your classes?

MR. WESTERVELT: No; some of our classes recite entirely by speech, but the most of our classes recite almost entirely by spelling by fingers. In the kindergarten it is done entirely upon the fingers except special instances, just the same as is done in all combined method schools. The next page is "drink;" and here are some cows drinking water. The next is "exercise;" and here are some children playing. The next is "sleep." Those constitute the five necessities.

MR. GRADY: Do you give your little children slates?

MR. WESTERVELT: The young pupils, the E class, use the slates for drawing. These slates are marked upon one side, just as the kindergarten table is marked. And they are taught by laying splints and other forms to be drawn upon the slates, the same figures as are laid upon the table. The time for the consideration of this subject has now expired. I have given in this printed report as full a statement of what we do at our institution as could be given. [Referring to "Daily Paper for Our Little People," vol. 6, No. 40.] Each teacher has written a report of her own class work for each hour; and these several reports have been combined under the head of each grade.

On motion of MR. WALKER it was decided to hold evening sessions hereafter.

Normal department adjourned until half-past seven o'clock P. M.

AFTERNOON SESSION.

PRESIDENT GILLETT in the chair called the meeting to order.

DR. PEET made the opening prayer.

The minutes of the last meeting were read and approved.

MR. WESTON JENKINS, of New Jersey, then read the following paper entitled

APHASIA IN RELATION TO DEAFNESS.

In the popular conception, every person who is properly classed as a deaf mute, is so entirely deprived of the sense of hearing that even the most violent concussions of the air can convey no impression to his brain, except by the way of the ordinary non-specialized nerves of sensation. To him, not only are the tones of the human voice, the

notes of music, and the song of bird inaudible, but the roar of artillery and the crash of thunder are as if they were not; and he moves amid a maddening din of discordant noises, unconscious of anything but profound silence.

It is needless to say to this audience, that any condition at all like this is the exception rather than the rule among those who are brought under our care. No feature in the prospectus of this convention has been more attractive to teachers of the deaf throughout the country, than the prominent part assigned to the cultivation of hearing, and we all hope to profit largely by the researches of those of our number who have been especially successful in this direction.

I suppose that every head of a school for deaf mutes often has application made to him for the admission of pupils, who are described as "dumb, but not deaf." Generally, such pupils are of enfeebled intellect, their disability varying from absolute idiocy upward to a mental condition which falls just short of the activity required to seize and comprehend the complete forms of spoken language.

In some cases of this class, where the deficiency is least, considerable benefit may be derived from instruction by the methods adapted to deaf mute pupils; though, probably in every such case, better results could be attained in a school intended especially for feeble-minded youth.

There may be a second class of the "dumb, but not deaf," consisting of those whose vocal organs are malformed, paralyzed, or otherwise unfitted to produce articulate speech; but, in my own experience, I have never met with a case in which the inability to speak was demonstrably due to this cause.

I wish, in this paper, to give a brief account of a case which has lately come under my observation, in which entire inability to produce articulate sounds seems to coexist with the possession of normally acute hearing, and yet not to be due to either of the causes mentioned above. I shall venture to put forth a hypothesis as to the cause of this inability, which, if not shown to be untenable, it may be worth while to use in determining the proper treatment for this and other similar cases.

Walter C. F——, a youth of nineteen, was admitted to the New Jersey School for Deaf Mutes April 22, 1886. He was rather undersized for his age, and appeared not well nourished. His appearance indicated a scrofulous diathesis, and he suffered from chorea in a very noticeable degree. When spoken to, or when his attention was attracted to anything, he uttered loud and harsh cries. On applying tests for hearing it was evident that he was not deaf—that in fact his hearing was as good as the average. His inability to speak being plainly not due to deafness, and, taken together with his unprepossessing exterior, justified the presumption that he was of a grade of intelligence too low to profit by instruction. However, I determined to try him, and took him in hand myself. To my surprise he learned in a very few brief lessons to recognize the written names of several objects, remembering them correctly from one day to another. His attempts at copying, though they could not be called successful, evidently failed by reason of his physical infirmity, and not because he lacked the perception of form.

I tried to teach him the spoken words for the objects shown him, as door, hat, key. The sounds evidently awakened no idea in his mind, nor could he give any approximate imitation of them. When

I pointed to the written word or to the object while pronouncing the name, he seemed to understand that I meant the sound as an equivalent of the writing, but he could not learn to distinguish between two spoken words.

On the twenty-fifth of April, he having been in the classroom only two days, he unfortunately fell and fractured his lower jaw, and as his recovery was very slow, and retarded by complications, he did not attend the sessions of school again during the term. While confined to his room I saw him often, and was confirmed in my opinion that he was not at all below the average of our pupils in intelligence. He rapidly learned to converse with the other boys in signs, and interested them by graphic descriptions of the fishing industries of his native town. Finding him once looking at a slate covered with writing, I pointed to him and then to the slate, looking inquiringly at him. He took the idea at once and smilingly shook his head; then, looking around, took up a book, and opening at the fly-leaf showed me the owner's name, then pointed to the slate.

In trying to account for the apparent contradictions in this case, I was reminded of the phenomena recorded in the cases of the somewhat rare disease of aphasia—or loss of speech. This form of mental disease was first prominently brought to the notice of the medical profession, as I believe, about twenty-five years ago—certainly it was then for the first time known to the lay public—and it has since then been carefully studied by eminent surgeons and biologists. In the various forms which this disease assumes, and in its different degrees of intensity, the patients may merely be unable to recall the names of familiar objects, being forced to describe them by circumlocution, or he may be unable to speak intelligibly at all, substituting, perhaps, one word for another, or, perhaps, uttering mere gibberish. He may, at the same time, understand what is said to him, or he may have lost entirely his ear for language, so that his native speech falls meaningless on his ear. In the corresponding way, and in the same varying degree, the ability to remember and use written language may be lost.

In all the phases of this singular disease, it is discriminated from mere imbecility by the circumstance that the mind remains capable of performing all its functions except those involved in the understanding and the production of speech. For instance, the patient may be able to play a hand of whist correctly, but not to name a single card.

The case of the young man described in this paper seems to me to present the symptoms which we should expect to see in a congenital case of that form of aphasia known by the self-explaining term *word deafness*. It seems evident that a person so affected would be very likely to be classed as a deaf mute, unless attention should be particularly directed to his ability to hear, and it is notorious that such attention is seldom given. Consequently, if this defect is occasionally present from birth, there may be a number of such cases, and they may appear, from time to time, among our pupils.

The course of instruction adapted to the teaching of written language to deaf mutes should, as it seems, be the best adapted to secure the same end for those affected with word deafness, and the progress to be expected should be the same in both cases. The requisition of oral language in such cases would seem to be out of reasonable expectation.

Without professing that the facts in the case described above demonstrate the mental condition, by which I would explain them, I myself am so impressed by them that I shall always be more careful than I have hitherto been, before passing the verdict of hopeless mental imbecility on a speechless child possessed of the sense of hearing.

THE CHAIRMAN: This paper is now before the convention for consideration.

DR. PEET: The paper just read is one full of suggestions. I have under my instruction—I might say my personal instruction—a boy, the child of very respectable and intelligent parents, who had been sent to school since he was a small child, and had private instructors, in the hope that he might be brought to a knowledge of the English language. His parents did not regard him as imbecile, although he could hear perfectly and obeyed all directions that were given to him, and yet he did not speak. Ordinarily, the possession of hearing without the possession of speech is *prima facie* evidence of imbecility. But his parents could not believe that he was imbecile. Finally they corresponded with me, asking my advice in the matter, and I advised them to bring him to me, and let me make an examination of him. I was very soon convinced that he was a bright, intelligent boy, whose faculties had been somewhat benumbed by the fact that they had not been exercised in expression. The boy could not write the names of objects around him, and could not use sentences. The question, which had been studied very minutely by physicians, as to why he had lost his hearing, had been unanswered until the time he was brought to us. We attempted at first to teach him the manual alphabet, but we very soon discovered that there was a physical difficulty in the way of his forming the letters; and on further examinations, proved that he was paralyzed in his fingers and paralyzed in his organs of speech. Every test that we subjected him to led us to believe that paralysis was the foundation of his inability to speak.

My first idea in attempting to teach him the English language was to convert his hand into a tongue. He could not pronounce a single word, nor make any sound except a most simple one which could not be combined with others. We began by teaching him when we gave him a word, such as "pen" for instance, to give the letter of the manual alphabet which corresponded to the power of the letter. Giving him the word "pen," I simply closed my lips, it being a silent letter until the vowel that follows it gives its tone; and when I closed my lips I taught him to put his fingers in this way [giving the sign]; and he learned that when I closed my lips he was to make the letter "p" with his hands. Then I would give the short sound of "e" and teach him to make the sign for that sound; and when I gave the sound of "n" he would give with his hands the sign for "n." I did not teach him to spell "pen." But I would then say "pen, pen, pen," and he would make the sign for those letters. Then, after having given him enough words to get all of the letters of the alphabet from their sounds and not their names, I felt as if I had converted his hand into a tongue, so that he imagined that he was speaking when he made the manual alphabet. The manual alphabet was converted into an expression of the power of the letters in his mind. Then I took a simple reader (Monroe's) and read the little words and the little sentences by which the various sounds of the English alphabet were developed, and now he can, in accordance with sound, spell out the little sentences which are in that reader. And, in reviewing,

we let him take the book, and while the teacher speaks he spells the words right along for the whole sentence; and he understands them. We ask him all sorts of questions. We ask him to point to the picture of the boy, and ask him, "What is the boy doing?" He is unable yet to reply, as he has not English enough; but when we ask him, "Is the boy catching the bird?" he will shake his head; and when we will ask him, "Is he shooting the bird?" he will answer "Yes," by signs. When we tell him to point at what he is shooting he will point to the bird. When we ask him, "Is he shooting the tree?" he will answer "No," by a sign. So we ask him all sorts of questions; but he has not yet language enough to reply in answer to them. But we are developing the power of language, converting his fingers into a tongue. And the next process that I was beginning with him just as he was leaving, at the close of the term, was to have him write from dictation instead of using the manual alphabet. I have an idea that after awhile he will think in language; that is, that he will associate the forms of language with his fingers; that he will imagine himself speaking with his tongue, so that instead of hearing himself speak he will feel himself speak by the use of the manual alphabet.

It is a most interesting case; one which I shall watch very narrowly, in the hope of making some discoveries in regard to the best method of teaching these hearing mutes; not imbeciles, but weak-minded, why? On account of their original condition? No; but because they have not had the power of expressing their thoughts in speech or writing. In order to get strength of mind; in order to have power over one's faculties, we must use them. And that, I think, is at the bottom of a great deal of what is called imbecility; that they have not had the power of using their organs of speech, and for that reason their faculties have been unexercised, and they are weakened.

And I would also say that I think that there are many points in the education of the deaf and dumb that could be used with very great benefit in the instruction of the feeble-minded. And I am getting more and more of the opinion that our methods ought to be introduced into that class of instruction, and that it would be a very great benefit if the institutions for the feeble-minded were under the care and guidance of those connected with the institutions for the deaf and dumb. [Applause.]

REV. GALLAUDET: I desire to ask if this lad uses any of the common signs of the institution? Does he communicate with the boys around him?

DR. PEET: Yes, sir; he has picked up this intercourse very rapidly.

MR. ELY: If I understand you, you taught this boy to spell from a movement of the lips?

DR. PEET: Yes, sir.

MR. ELY: Does that involve phonetic spelling; or how did you get over that difficulty?

DR. PEET: This boy can hear, and it is not necessary that he should see my lips except where there is a silent letter. For instance, if I have given him a subtonic letter, not one of the mute letters, it would not be necessary for him to look at my lips. But, if I had given him a word like "table," in order to get the letter "t," it is necessary for him to look at the position of my tongue, because it is a silent letter. But, if I should say "d," he would understand that that, being a subtonic letter, would be "d." But the letters "p," and "t" are silent, and in order that he might know the sound I was going to

give, I had to call his attention to the initial letters of the words "table," and "pen."

MR. ELY: Suppose it was the word "photograph?"

DR. PEET: If I was teaching a deaf mute to read the lips, I should call his attention to the fact that I made the aspirate "f" [illustrating]. I should spell it phonetically then, if I could. But, with this boy, I have adopted the plan of teaching him to give the true spelling of the words; as, "pho" for pho.

MR. BROOKS: My own judgment is, that a large share of mental weaknesses from which these persons suffer, grows out of physical infirmity, and that if you can cure the physical infirmity of a class of people who are mentally weak, you place them in a condition where they can certainly be improved, and instructed beneficially for themselves and society.

The most remarkable institution we have in New York State, was designed for the benefit of what are called "the imbeciles in the State." And I remember, about thirty years ago, when a man of large benevolence gathered up from various parts of the State, at first some six or eight children, which was the beginning of what has now grown into a great public institution. And of those children whom I first saw, there was not mental capacity enough to put the hand inside of an ordinary barrel hoop. So weak was the mind, so far from anything like a concentration on knowledge, that the child would bring his hand this way and that, and by and by, as a great success on the part of the teacher, the hand was put inside of the hoop, and then the hoop was reduced finally into a ring, and the mind so cultivated that a pencil could be put through a small ring. And from that wildness of nature has grown up one of the most remarkable institutions in the country, and the first one that was established in the country.

And I draw from this the conclusion of the possibility of taking almost any possible infirmity, and by kindness of heart in the cultivation of the mind, so educating what are called imbeciles, and what are known to be insane, as to make it possible to make even this class of beings useful in society.

That institution has grown, until now it has become one of the large ones of the State, and what were called imbeciles years ago, and what were helpless beings for any self support, are now so conducted that the girls and women of the institution are able to make their own dresses, and improve their own minds; and, where in the beginning it was impossible to put a hand inside a hoop, these children have gone to the blackboard, and made, for the time, almost as much progress in knowledge as we have made in the institutions for the instruction of the deaf and dumb.

Nothing is more true than the sentiment of the poet when he says, addressing himself to everybody occupying a responsible position: "Canst thou not minister to a mind diseased; pluck from the memory a rooted sorrow; erase out the written troubles of the brain, and with some sweet, oblivious antidote cleanse the stuffed bosom of that perilous stuff which weighs upon the heart?"

Such instruction is impossible for the imbecile, for the deaf and dumb, or for the blind, but there is no creature upon the face of God's earth whom it is not possible to improve morally and physically. [Applause.]

MR. WILKINSON: If I had known of this paper before I should

have had one and possibly two cases to present which have a decided bearing upon the discussion. I am satisfied that what Mr. Brooks has just said is true, that a great deal can be done for almost every mind. But I think Mr. Brooks, and all of those who have had experience and observation in the management of feeble-minded in our schools, will say that there is a class that is beyond the reach of even the most humane and patient endeavor. Our schools for the feeble-minded always have a large proportion of children that they class as incurable; with whom they admit that they can do absolutely nothing, and can only give them food, drink, clothing, and the physical comforts, and wait patiently for their release from the burden of life.

But there is another class that we have, and I suppose every institution for the deaf and dumb has had experience of. It is a limited class, a class that I admit I have seen but very few of in an experience of nearly thirty years; who seem to have normal intelligence, with bright face, bright eyes, who are quick to learn through signs, and yet who have a defect of hearing, or rather an inability to translate the impressions that the ear receives into speech.

I am reminded of an exceedingly interesting case, which I will send for before this convention adjourns. Some years ago a bright and pretty little girl came to me, who gave no evidence whatever of any weakness, physical or intellectual, but who could not speak. She could hear to a remarkable degree certain sounds. I would say to her in a low tone, "little girl," and she would turn immediately; and would recognize the voice. It was a case that it was conceded that they could do nothing with in the ordinary schools. The father had tried to have her educated in the schools where his other daughters were being educated, but they could do nothing with her; and so she became a pupil at this school. She has come to use language reasonably well for a child, or about as well as children ordinarily do, writes a very pretty letter, and learns her lessons well. And with this development of the mind has come also a development of speech. She is speaking now in all of the phraseology that she has learned, or that she has had reproduced, enough to make a decided impression upon the mind; and she speaks and recognizes all of these words and sentences very well, uttered in a very low tone of voice.

The point I am reaching is this: I believe there is some sort of brain difficulty; that it is not a difficulty of the vocal organs at all; that it is not what we would call ordinary weakness of mind. I believe it is a purely local trouble, something after the manner of aphasia. It has been pretty well ascertained that the loss of speech which sometimes occurs is due to an affection to a certain particular convolution of the brain. Whether medical science will ever trace all of our mental powers to certain convolutions or portions of the brain I am not so sure; but it seems to be pretty well established that the power of speech is more or less affected by the condition of a certain convolution. With this child I am satisfied that all of her speech has come from intellectual development. I do not think that she will ever have fluent and perfect speech. She heard so well that it was thought she ought not to be here; and at one time she was removed from the institution, because she could hear so well. It was thought by some that to have her here was a violation of the law. But she was afterwards readmitted, because she could not be educated elsewhere.

I have had another case that illustrates an entirely different condition. It was a child who could hear as well as I could; who would obey all sorts of orders; who would not say anything, but would answer with a nod of the head almost any question that came within the province of his experience; but a boy that absolutely nothing could be done with. We labored faithfully with that child for three years; yet he never could write a word or letter. Finally I advised his removal to the school for imbeciles. I will try to have that boy here at a future meeting of the convention, to illustrate those two forms of lingual defect.

I think we have enough cases of this kind coming under observation in our institutions to justify a very thorough investigation of the problem to be solved, why it is that these children have this defect. It is not always physical. These are well nourished children. Their condition is not from need of care and attention, but it is, I think, from some local brain difficulty, the secret of which we have not yet discovered, but which is a worthy object of investigation by medical men generally.

DR. LATHAM, of Indiana: At the last session there was mentioned a case of a boy coming to the school, who was apparently active, and learned signs readily but could not learn or write one single word. He could not speak a syllable or learn to write a word; and he remained that way the whole term. He would obey orders given by signs, and do errands, but not a word could he understand to speak or write. And there was a case similar to that, some years before, where a boy could not speak or read, but could learn very well to write language and made commendable progress for two or three years. These cases came under my own observation.

DR. GALLAUDET: A case came under my notice in an institution in charge of the distinguished Dr. Kerlin, and which interested me much. I was crossing through the corridor, and he stopped and spoke to a boy about sixteen years of age, who had an apron upon him and was painting the wood work in the corridor. He conversed with the boy, who answered his questions very readily and was remarkably pleasant and good natured; and I also talked with him a few minutes, and we passed on. Dr. Kerlin said: "I would like to tell you about that boy. When he came here he was about twelve years of age, and his friends informed me that he had never spoken, or that they had never known him to speak. He seemed to understand perfectly everything that was said to him." The doctor said that he examined him very carefully; examined his vocal organs, found there was no defect there, and that he came at length to the conclusion that the simple reason that the boy did not speak was perversity; that he would not; that he had the power to speak evidently, but would not use it. And Dr. Kerlin then told me the process by which he was made to speak, and it was one which well illustrates the very great importance of sending away from their parents children who are under the affliction of feeble-mindedness in any degree, because the process by which he brought this boy to his speech was one which no parent would ever have the heart to resort to. It was the starvation process. The boy was simply starved into speech. Dr. Kerlin had faith that the boy could speak if he would, and he refused him his food until he asked for it orally. The starvation was carried to a certain point, Dr. Kerlin knowing that it was not risking his life or health, and at length the boy asked for bread and meat, and got it;

and in a very short time he was brought into the full use of his vocal organs.

I do not say that that process would prove successful in every case; but it is well enough to bear in mind that this apparent inability to speak is simply indisposition, more or less.

MR. ELY, of Maryland: I would like to mention a case that, while it is not precisely in a line with the cases mentioned by Professor Jenkins in his paper, is somewhat similar. It occurred when I was connected with the Ohio institution some years ago, and illustrates the condition of the brain as affecting the power of speech.

The boy was brought to the institution for the deaf and dumb at the age of sixteen, and had just lost his hearing, and, by a singular coincidence, his speech also. Naturally, of course, the speech would not have been lost, but in this case the speech and hearing were both gone. He remained in the institution for some weeks or months, when suddenly he was taken with violent pains in the head, and his hearing came back and his speech was restored, but he was blind. Not only was he unable to see, but his eyes were closed, and, raising the lids, the eyes were sightless. After recovering from his illness he was transferred to the institution for the blind, and after remaining there for some weeks he was suddenly taken again with severe pains in the head, and his sight was restored, but he was deaf and dumb. That was repeated yet a third time. Beyond that I do not know the history of the boy; but there evidently was a brain affection, transferred perhaps from one convolution of the brain to another, by which he was alternately made blind and deaf and dumb.

This case excited considerable attention at the time, and was disbelieved by some medical experts, one of whom went to great pains to publish a long letter in the Washington papers ridiculing the whole idea. But the facts are as I have stated them, as can be witnessed by many. Dr. Fay can testify to the correctness of it.

THE CHAIRMAN: In the Illinois institution at this time there are three such cases as have been referred to here—boys who hear perfectly well, but yet cannot be taught to speak. They can be taught to read; they will perform all errands they are directed to, but it is impossible to get them to speak.

PROFESSOR E. A. FAY, of Washington, then read to the convention a paper entitled—

MORTALITY AND VITAL STATISTICS OF TEACHERS OF THE DEAF.

Within recent years there have been but few numbers of the "Annals" in which it has not been the painful duty of the editor to announce the death of one or more loved and honored members of our profession; and sometimes the obituary notices have been so extensive as to cast a shadow of gloom over the whole issue. As I was arranging the necrology of the last number it occurred to me to renew an inquiry which was proposed thirty-four years ago by a former editor of the "Annals,"* but which was then left unanswered from the want of data: *Are teachers of the deaf more liable to disease and death than persons of other occupations?*

The Mortality and Vital Statistics of the Tenth Census of the United States, collected and compiled under the competent direction of John

*Luzerne Ray, American Annals of the Deaf and Dumb, vol. IV, pages 154-156.

S. Billings, LL. D., Surgeon, U. S. Army, are much fuller and more complete than those of any previous census, but are still somewhat defective, as is shown by comparing the returns from certain States with statistics obtained in those States from other sources. "The census year 1880-81 was a fair average year as regards mortality," and, making due allowance for the deficiency just mentioned, the census returns may properly be taken as our basis of comparison.

Inasmuch, however, as all, or nearly all, our teachers are between twenty and seventy-five years of age, we must eliminate from the census returns the statistics of infancy, youth, and extreme old age, and take only the portion of the population which is of corresponding years with the subjects of our inquiry. The total population of the United States between the ages of twenty and seventy-five, according to the last census, was twenty-five million five hundred and thirty-two thousand eight hundred and sixty-five, and the number of deaths in the census year between those ages three hundred and three thousand two hundred and thirty-one, giving a proportion of seventeen and nine tenths deaths per one thousand of living population. If we add thirteen per cent, which Dr. Billings considers a fair approximate estimate, for probable deficiencies in the returns, we have twenty and two tenths as the number of deaths per one thousand of living population between the ages of twenty and seventy-five.

The total number of teachers of the deaf in the United States is very small for statistical purposes; we shall therefore obtain more trustworthy results by not limiting our inquiry to a single year, as the census does, but by extending it over as long a time as possible. The longest time for which I have been able to obtain accurate statistics is ten years, and I have accordingly taken the last decennium, 1876-1885, inclusive, as the period for investigation. Even this time is too short, in view of the smallness of our total numbers, to allow of definite conclusions; but the results reached will at least afford some indications of probability, and they may serve as a starting point for more precise and accurate deductions at some future date when the requisite length of time shall have elapsed.

The occupations and mode of life of teachers and Principals (or Superintendents) of schools for the deaf have little in common, and their mortality rates, as will be seen, differ widely; I shall, therefore, make a separate examination for these two classes. The Principals of several small schools who have little or no assistance in the school-room, and whose work is consequently instruction rather than superintendence, are included among the teachers; the other Principals and Superintendents are considered separately.

The mean annual number of teachers (not including Principals) during the decennium under review, was three hundred and ninety-five; total number of deaths, thirty-nine; mean annual number of deaths, three and nine tenths, being at the rate of nine and eighty-seven hundredths deaths per thousand teachers. This result, giving a mortality rate less than one half that for the whole population of the United States between the same ages, is surprising; especially must it be so to those who have been wont to believe, as has been maintained by one or two writers in the "Annals," that the occupation of deaf mute teaching is peculiarly wearing, both physically and mentally, and that it tends more than others to undermine the vigor of the system. It is true that the occupation is a laborious one. During the hours of school the faithful teacher of the deaf—especially

with a class of young children—works as hard as any one can or ought in any kind of employment. He must give some time out of school also to the preparation of his lessons, and in some institutions to supervisory duties. On the other hand his real, hard, confining work is, in most cases, only for five hours a day, more or less, and only on five, or five and a half, days in the week; while his summer vacation of about three months affords him a much longer period of rest and recreation than falls to the lot of most workers. Our profession has the further advantages that we are free from the feverish excitements and harassing anxieties incident to the severe competitions and fierce rivalries of many employments; our salaries, too small though they often be, are regularly and promptly paid; we have comfortable and healthy homes; we live, I trust, temperate, moral, domestic lives. Considering these favorable circumstances, and remembering that the census returns include persons engaged in the most dangerous and unhealthy occupations, the dwellers in crowded cities and filthy tenement houses, the inheritors of fatal tendencies to disease, and the intemperate and vicious who bring disease and death upon themselves, it is not strange that our mortality rate is below the average. Still, some further explanation seems necessary why it should be so far below. There are no data for the comparison of death rates of different occupations in the United States, but in England, where statistics of this kind have been collected, no occupation has a rate of mortality so low as ours. The nearest approach to it, according to the latest returns on the subject,* is that of clergymen, who have ten and twenty-eight hundredths deaths per thousand living between the ages of twenty-five and sixty-five; between the ages of twenty and seventy-five the number would be considerably higher, on account of the large increase in the proportion of deaths between the ages of sixty-five and seventy-five. Next to clergymen, in England, agriculturists enjoy the lowest death rate; schoolmasters rank fifth on the list, having a rate of thirteen and twelve hundredths per thousand living between the ages of twenty-five and sixty-five. The death rate for all males in England between those ages is seventeen and seventy-two hundredths per thousand living.

Dr. Billings in conversation has suggested to me one fact which vitiates the results of the mortality statistics of school teachers generally, viz.: that many teachers do not remain in the work permanently, but abandon it for other occupations. This does not apply so much to teachers of the deaf; and, moreover, our returns include all deaths, within the past ten years, of persons who have been teachers of the deaf at any time within that period, even though they may have retired from the profession some years before their death.

Possibly, however, the extreme lowness of our death rate is due to the probable fact that the mean average age of our living teachers is less than the mean average age of the general population between the ages of twenty and seventy-five; for it is a universal rule that the death rate of any group of adults increases with its mean average age. Unfortunately I have no statistics of the ages of our living teachers; but inasmuch as our numbers have increased rapidly with the growth

* William Ogle, M.D., Supplement to the Forty-fifth Annual Report of the Registrar-General of Births, Deaths, and Marriages in England. London: Eyre & Spottiswoode, 1886.

of our schools within the last thirty years, rising from seventy-five in 1857 to four hundred and seventy-six in 1885, and the additions to our ranks have consisted chiefly of *young* men and women, it is probable that our mean average age is now less than that of the general population between the same extremes of age. I hope at some future time to obtain statistics of the ages of our living teachers; that we may know what proportion of our exceptionally low death rate is due to the nature of our work, and what to the exceptional lowness of our mean average age.

Of the causes of death I have returns in thirty-seven cases, as follows:

Dysentery.....	2
Enteritis.....	1
Malarial fever.....	2
Typhoid fever.....	2
Debility.....	1
Old age.....	4
Consumption.....	10
Cancer.....	3
Tumor.....	1
Cerebral meningitis.....	1
Apoplexy.....	1
Congestion of the heart.....	1
Pneumonia.....	4
Calculus.....	1
Necrosis of the skull.....	1
Eczema.....	1
Suicide.....	1
Total.....	37

One case, also, is reported of death "from a complication of physical maladies, aggravated by hard school-room work."

The only one of these diseases that calls for special notice is consumption, the ten cases of which form an unusually large proportion of the whole number. The proportion of deaths assigned to this disease in the United States census returns was one hundred and sixty-six and sixty-two hundredths per one thousand total deaths; and that included the deaths at all ages. Our statistics give a proportion of two hundred and fifty per one thousand deaths between the ages of twenty and seventy-five. No doubt this large proportion is partly due to the fact that there are some diseases causing many deaths in the general population, as for instance those resulting from the alcoholic habit and those connected with maternity, from which teachers of the deaf are almost if not entirely exempt; but this is probably not sufficient to account for it wholly. May it not be that the inhalation of crayon dust is one cause of the large number of deaths from consumption. English statistics show that of persons engaged in dust-inhaling occupations—such as workers in cotton and woolen factories, cutlers and file makers, stone masons and bricklayers, Cornish miners and pottery makers—a much larger proportion die of consumption and diseases of the respiratory organs than of the general population. Mineral dust, especially the dust of stone, is peculiarly fatal. Among Cornish miners and pottery makers the mortality from lung diseases is almost three times as great as among average males, and it is five or six times as great as among fishermen, who are free from exposure to dust. For workers in chalk we have no returns; probably chalk dust, being softer and more rounded, is less deleterious than some other kinds of mineral dust, but it is hard and gritty

enough to be irritating to weak lungs, and there is often a good deal of it floating in our school-rooms. Slate or lead pencils should be used in preference to chalk whenever feasible. Since crayons cannot be dispensed with altogether, those kinds should be chosen which are least productive of dust; crayon writing should be erased carefully and gently, and at recess or after school rather than during school hours, and erasers, by frequent cleansing in the open air, should be kept as free from dust as possible.

I have the ages of thirty-eight of the thirty-nine who have died. The two youngest were twenty-one years of age; the three oldest, seventy-four; the mean average age was forty-four.

I have also obtained statistics of the teachers who during this decennium have retired from the work of deaf mute instruction temporarily or permanently on account of ill health. They are thirty-three in number, and the causes of their retirement in thirty-one cases are as follows:

Nervous prostration	8
Consumption	6
Weakness of lungs	3
General debility	3
Accidents	3
Old age	3
Insomnia	2
Insanity	1
Cancer	1
Rheumatism	1
Total	31

Nine of these have since died, and eight of them are included in the statistics of death above given; the ninth died during the year 1886, which does not come within the period of investigation. Thirteen have recovered, and of these ten have returned to the work after a rest of from two months to two years. Three are still invalids. With respect to the remaining nine, I am not informed of their present state of health. Five of the thirty-three were in delicate health, one of them a confirmed invalid, when they began teaching. The nervous prostration of three of the eight thus afflicted is attributed to overwork in teaching. One case of insomnia, which resulted in suicide, was due to overwork outside of the school-room, in a direction entirely apart from that of the profession. In the case of the one who became insane, the disease was hereditary. The three accidents had no connection with the duties of instruction nor with institution life.

We have no statistics whatever of other occupations with which to compare these cases of retirement from work temporarily or permanently on account of ill health, but we know that in all occupations there are many such instances. While their occurrence among teachers of the deaf illustrates the truth that it is impossible for one to continue in the work who does not enjoy good health, they are probably not sufficiently numerous to indicate that the profession is unhealthy or peculiarly wearing to the nervous system.

The mean annual number of male teachers was one hundred and sixty-eight; of female teachers, two hundred and twenty-seven. The number of male deaths was twenty-four, which is at the annual rate of fourteen and twenty-eight hundredths per one thousand living; the number of female deaths was fifteen, or six and seventy-eight hundredths per one thousand living. This gives a very much higher

death rate for male than for female teachers; but the difference is perhaps to be explained, to a considerable extent, by the fact that the average age of living male teachers is probably greater than that of female teachers. As already stated, I have no statistics of the ages of our living teachers; but inasmuch as the employment of ladies in the work has only recently become common, their average age is probably considerably less than that of the male teachers. The steady increase in the proportion of lady teachers since 1851 is shown by the following table:

YEAR.	Number of Male Teachers.	Number of Female Teachers.
1851.....	49	3
1857.....	61	14
1868.....	93	50
1875.....	139	134
1885.....	176	300

The average age of the male teachers at the time of death was fifty-three; of the female teachers it was thirty-one. If there is as much difference in the average ages of the living male and female teachers it is, perhaps, sufficient to account for the difference in the death rates.

The number of male teachers who gave up teaching temporarily or permanently on account of ill health was ten; of female teachers, twenty-three; indicating that a smaller proportion of women than of men find their health and strength equal to the work. The three cases of accidents, however, and four of those who were in delicate health when they began teaching, were ladies. If we deduct these seven from the twenty-three, the numbers are rendered more nearly equal, though considerable disparity still remains.

The mean annual number of deaf teachers was one hundred and thirty-two; total number of deaths, fourteen; annual proportion of deaths per one thousand living, ten and sixty-six one hundredths. This is a slightly higher death rate than that of the hearing teachers, which is nine and five tenths, but it is very much lower than that of the whole population of the United States for the same ages; and, so far as it goes, indicates that those life insurance companies which decline to insure the deaf, on the ground of their greater liability than the rest of the community to accident and disease, are in error. The average age of the deaf teachers who died was forty-one. The number of deaf teachers who gave up the work temporarily or permanently on account of ill health was only three; a very much smaller proportion than that of hearing teachers. The causes of the deaths of thirteen deaf teachers were as follows:

Dysentery.....	1
Enteritis.....	1
Debility.....	1
Consumption.....	4
Cancer.....	2
Pneumonia.....	2
Calculus.....	1
Necrosis of the skull.....	1
Total.....	13

If we had the requisite data, it would be interesting to determine whether, as has been on the one hand asserted, and on the other con-

troverted, in the "Annals," the work of articulation teaching is more laborious and wearing than teaching by the manual method. Unfortunately there are no statistics to show exactly the mean average number of articulation teachers during the decennium. We learn from the tabular statement prepared by Miss Rogers, and published in the Sixteenth Annual Report of the Clarke Institution, that in 1876, the first year of our period of inquiry, there were not more than seventy-eight articulation teachers, and probably the number was less than that. In 1883, according to the same authority, there were one hundred and twelve. In 1885, estimating from the number of pupils taught articulation, there were one hundred and thirty-four. Probably one hundred is not far from the mean average number for the decennium. There were five deaths of articulation teachers, giving the extremely low annual death rate of five per one thousand living—a rate less than one half that of the manual teachers, which is eleven and eighty-seven one hundredths, and one fourth that of the whole population of the United States. Articulation teaching may be wearisome, but according to these statistics it cannot be regarded as fatal.* It should be remembered, however, that oral teaching is comparatively a recent work in this country, and that the mean average age of articulation teachers is probably less than that of any other group under consideration.

Of the thirty-three teachers who retired from the work temporarily or permanently on account of ill health, twelve were articulation teachers, apparently a large proportion; but among them are included the three cases of accidents, two who were invalids when they began teaching, and one who became ill from a cause that had nothing to do with the school-room. If we deduct these six, the proportion remains nearly the same as that of the manual teachers.

We now come to the Principals and Superintendents of our schools for the deaf, and here, I am sorry to say, I have no longer pleasant and reassuring statistics to offer. The mean annual number of Principals and Superintendents was forty-nine; total number of deaths, fourteen; annual number of deaths per thousand living, twenty-eight and fifty-seven hundredths, a proportion more than two and a half times as large as that of our teachers, considerably larger than that of the whole population of the United States, and surpassed in the English statistics only by those of the most unhealthy and deadly employments. The only consoling circumstance I can suggest is the untrustworthiness of all deductions drawn from such small numbers. I hope and trust the statistics of the future will show a much lower rate. Still, I do not think it can be expected to approach that of the teachers in lowness, for the duties of the office make a much severer demand upon the vital powers. The Principal is and ought to be responsible for the intellectual, moral, and industrial training of the pupils; their care and treatment in health and in sickness; the selection of teachers and other officers; the representation of the institution before the public, and the obtaining of means for its support from the Legislature; the correspondence with the parents of pupils and others, including the statistic fiends of the Bureau of Educa-

*Since this paper was read I have been informed that in the case of one articulation teacher, the cause of death, as given for official record by the physician in attendance, was "brain fever and paralysis of the throat, caused by overwork in teaching articulation." The cause of death named to me in the first instance was "cerebro-spinal meningitis," and it is so recorded in the foregoing tables.—E. A. F.

tion, the Census Office, and the "Annals;" the petty and vexatious details of daily administration; and many other items too numerous, perhaps too trivial, to mention, but which taken altogether impair his strength and wear away his life. Happy, too, are the Principals who escape wholly the jealousies and rivalries of subordinates; the suspicions and interferences of individuals in the Board of Management; unjust censure from the public press; unfair investigation; cruel condemnation, or unsatisfactory vindication. All these things make up a burden of responsibility and anxiety which few men have the strength to carry for a long time. The wear and tear of such a life is too great; the vitality becomes exhausted; disease and death find an easy conquest. Perhaps the case is one that admits of no remedy; still I venture to make a few suggestions which, if followed, would, I think, tend to lower the death rate of Principals.

1. Let no person accept the office who does not possess an unusually strong constitution.

2. Let the Principal refuse to be annoyed with *unnecessary* petty details. Why, for instance, should he sell postage stamps to teachers, when they can be bought at the same price at the Post Office, and a walk thither is just what we all need for our health before or after school?

3. Let him, when he begins to be weary—nay, sometimes without waiting for that—even in term time, take an entire rest for days or weeks from his usual duties, and in change of scene and life recruit his health and strength; and to this end let him have among his assistants at least one person who, possessing his entire confidence and being otherwise well qualified, can take his place; so that, during his absence, with a little unusual help perhaps from the other officers, the wheels of the ordinary routine will move almost as smoothly as when he is at home.

4. Let the Principal have a residence, or at least a dining-room, separate from that of the institution. His presence in the pupils' dining-room at certain times is doubtless desirable, but let him take his own meals with his own family in peace and quiet. This may seem a little thing, but its importance cannot be overestimated.

The causes of the deaths of twelve Superintendents and Principals were:

Erysipelas.....	1
Consumption.....	2
Cancer.....	1
Apoplexy.....	1
Paralysis.....	1
Congestion of the brain.....	1
Pneumonia.....	3
Disease of the kidneys.....	2
Total.....	12

The mean average age of ten of the Principals who died was forty-nine, which is four years younger than that of the male teachers, though comparatively few men are appointed Principals under the age of thirty.

Six Principals, besides those who died, were compelled by ill health to retire temporarily or permanently from active labor during the decennium. Three of these were restored to health by rest from work, aided in one case by foreign travel and in another by change of residence, and returned to service; a fourth expects to resume

labor this autumn. "If I had not stopped work," writes one of the strongest, "I have no doubt I should have gone to my grave or an insane asylum."

The following table summarizes the statistics of deaths, and retirements on account of ill health, above presented:

	Mean Annual Number between Ages of 20 and 75.	Number of Deaths.	Annual Number of Deaths per 1,000 Living.	Average Age at time of Death.	Number Retired Temporarily or Permanently on account of ill health.	Annual Number of Retire- ments per 1,000 Persons.
United States	25,532,865	(1 yr.) 303,231	20.2	-----	-----	-----
Teachers of the deaf	395	(10 yr.) 39	9.87	44	33	8.38
Male teachers	168	(10 yr.) 24	14.28	53	10	5.98
Female teachers....	227	(10 yr.) 15	6.78	31	23	10.17
Hearing teachers...	263	(10 yr.) 25	9.5	44	30	11.41
Deaf teachers	132	(10 yr.) 14	10.66	41	3	2.27
Manual teachers ...	(Estimated) 295	(10 yr.) 35	11.87	45	21	7.12
Articulation teach- ers	(Estimated) 100	(10 yr.) 5	5.	36	12	12.
Principals and Su- perintendents	49	(10 yr.) 14	28.57	49	6	12.24

In conclusion, I have to thank the Principals and Superintendents who, at a time when they were unusually busy with labors relating to the closing of school, have given me the information upon which this paper is based. Some of them have kindly added suggestions of further subjects of inquiry, as with respect to the length of terms of service, marriage statistics, etc., but they came too late for my present purpose. If any one wishes to go into marriage statistics I will give him, as an encouraging item to begin with, the fact that one Principal informs me that he himself and five of his teachers were all married within one year, and none of them have regretted it yet.

MR. BROOKS: Mr. President, if I understand the first part of the paper which has been read, the conclusion from it is this, drawn from the census of the country, that there is a smaller mortality among the teachers in the deaf and dumb institutions of the country than among the general population of the country. The average of deaths in the country is a fraction over twenty in a thousand. And I wish here to state, as a Commissioner of Health of the State of New York, and one who has given some attention to the subject, that the average mortality of a country, with the means of securing healthy sewerage, drainage, and ventilation, ought not to exceed fifteen in a thousand. And, from study and observation, I have come to the conclusion that the proper lifetime of a man or woman, instead of being what is called sorrow if you reach threescore and ten, ought to be at least one hundred years. And there are abundant evidences in the

world that a proper mode of living will enable persons to arrive at that age.

England has been alluded to. I know of two districts in England, corresponding precisely in character, geographically and materially, where the death rate in one is fifteen in a thousand, and in the other twenty-two or twenty-three in a thousand. What causes that great difference? Simply the absence of proper drainage, proper ventilation, proper sewerage, and proper care of the life of the people. I am associated with an institution in the City of New York, known as "The Nursery and Child's Hospital," and have been so connected for a great many years. It was established by a benevolent lady, who was following the custom of the time, and who, perhaps, from her own physical disability, invited a wet nurse to take care of a child to which she had given birth. In the process of time she found this hired nurse in great sorrow and trouble, and asked her the reason. "Have you not every comfort in my home that any of my family have? Have you not everything that would add to your comfort?" "Everything," she answers; "but while I am giving nourishment to your offspring as a hired nurse, I am neglecting the child to which I myself gave birth;" following the custom too prevalent in a great many parts of the country, though there may be reasons for it. And that incident led to the establishment of the institution to which I made allusion, where the mortality of children of that class, under the care of the City Government, was from eighty-seven to ninety-seven per cent every year. Such was the care which the Government gave to the children of poor people in the great metropolis of New York. And the facts there corresponded with the facts in other parts of the country. And the incident which I have alluded to, led, first to the transfer of the child of the wet nurse to her own home, and then to the establishment of this institution, where the mortality to-day, instead of being from eighty-seven to ninety-three per cent, is less than fifteen per cent in the city, and less than seven per cent in the country branch of this institution.

This is one fact in regard to this great question, and I think there is none more important for us to discuss than what may save the lives of the people, young and old. And I present it, therefore, with the greatest emphasis I can command, when I say that the proper ventilation, and the proper drainage, and sewage, especially of public institutions, is the one great primary fact in the discharge of what I consider a great public duty.

There is another important fact drawn from the statistics of the country. We have imported into this country, directly, nearly ten millions of people born abroad; and every one of those human lives, taking an average of the good and the bad, and the worst, possibly, the money value of each one of those lives is \$1,000. And that is how the sickness of any number adds largely to the general expense. Physicians' fees, and absence from and inability to labor, and many such causes, add enormously to the general expense of the community, and to the general absence of that physical and personal economy that is necessary to the welfare of the State.

Now, I wish to dissent from my friend in one respect, and that is in regard to the hard work of teaching. I have had some experience of that in my early life, working in one of those old-fashioned primary schools in Massachusetts, where the law was that I, in common with others, should teach boys six hours a day, and girls two hours a

day. I have survived all that, and lived to a pretty good old age, with no better constitution than the average man. In my own occupation, for forty-one consecutive years drilling in one rut, in a much harder occupation than school teaching, I was enabled to work diligently ten and a quarter hours a day for every school day in those forty-one years [applause]; and, as a rule, I do not believe that one man in a million ever died from hard work, either in teaching, in mechanical work, or in any other occupation.

The greatest blessing the Lord ever gave to mankind was when he sent him forth with the admonition and the instruction that he was to earn his daily bread by the sweat of his brow; that the punishment for the crimes and errors committed is one of the greatest blessings visited upon us. In the institution which I represent here, the teachers, upon receiving additional pay, teach eight hours a day; and I do not think we have had a single mortality in consequence of that fact.

DR. GALLAUDET, of Washington: I feel sure that I speak for many here present whose duty it has been to manage affairs of institutions for the deaf; and when I rise to give thanks to my friend and colaborer for the very sympathetic and discriminating presentation which he has made of the burdens and labors that rest on the head of an institution, and I am glad to take this opportunity to say, if I may be allowed to speak personally, that it has been because our worthy editor of the "Annals" had, from time to time, devolved upon him temporarily the duties and the responsibilities of the management of an institution, that its head overburdened and overborne by cares might have that needed rest, for a longer or shorter time, that he might recuperate the powers and strength that were waning, that Professor Fay has learned to speak so decidedly and so clearly of what are the cares and burdens of the Principal, and how they may be lightened by those who are near him. And I return here, publicly, my sincere thanks and acknowledgments to him that I have been able to go away from my cares and to go with the feeling that they were in good and safe hands, that I have been able to hold my strength and vigor as I have. Often I have gone away from Washington and left Professor Fay as the acting President of the institution there, and left everything there behind and gone away with the freedom of a boy to regain health and strength for renewed labors. [Applause.]

MR. MOSES, of Tennessee: I think we are certainly all under obligations to Professor Fay for giving us in such a satisfactory way the collection of statistics that are certainly to be valuable to all connected with this work. While he has probably made apologies enough for the allowances that must be made on account of the short time which these statistics cover, and the small number of persons they embrace, still we all know that those are important factors in considering statistics. We can take a census report and prove almost everything by it; at least that has been my experience, where we take a small number of persons and covering but a small number of years.

I do not believe that the deductions made by Professor Fay to-day will hold good in the future. But I believe he has made a good beginning, and has given us a basis which year by year will be added to, and will make this subject clear. For one I know that the teaching of a class of deaf mutes is among the most laborious kinds of

work that can be engaged in. I can work ten or twelve hours a day in the field and not be so much fatigued or suffer so much nervous prostration as I do from five solid hours' work in the school-room. And I have had experience of that, sir. I taught for ten years, and went from school teaching into other work, in which I averaged more than fourteen hours a day of hard work and with severe exposure, and I was a stronger man at the end of three years that I was out of the school than when I left the school and went into that work.

I will not enter a comparison between the Principal and the teacher, for some of the overburdened Principals here might say I was not attending to the Principal's work as I should. But I do say that the work of teaching, if faithfully and earnestly followed, is as trying to the nervous system as any that I have ever been acquainted with, and I have engaged in several kinds of hard work. And I believe that it will be found after awhile that the teacher who earnestly and faithfully does his school-room work is entitled to as much consideration, and is making as much sacrifice for humanity and for his work, as any man engaged in any work and any profession. [Applause.]

MR. BROOKS: I omitted a single fact which I desired to state. In the New York Institution for the Deaf and Dumb the man who provides the food, the coal, and the necessary support of the institution, is not the Principal of the institution. I am neither speaking as a Principal nor as a teacher now, but as a man who has been a Director of the institution for thirty years. I have held that the Principal of an institution should have control of the educational department of that institution, and be, if possible, wholly exempt from those material things which belong to the buying of beef, pork, mutton, butter, coal, and all those material things. What relation have these things with the proper education of the deaf and dumb? Every Superintendent should have such assistants as will exempt him from all of these severe labors, which relate to the material part of the institution, and are as far from the educational department as they could possibly be. I believe in the complete separation of what belongs to education and what belongs to material things. We have followed that practice in our institution. I believe in the complete separation of those two departments of service.

MR. JENKINS, of New Jersey: I think that the subject alluded to by the last gentleman is hardly germane to the subject of the paper. I merely make this suggestion because I do not desire to have it inferred that the silence of his audience implies entire acquiescence in the proposition laid down by him. But the subject may very likely come up for discussion at another time of the convention.

The following paper was then read by MR. JAMES DENISON, of Washington, D. C., upon—

THE MANUAL ALPHABET AS A PART OF THE PUBLIC SCHOOL COURSE.

In some English magazine I remember reading a few years ago a story to the following effect:

A burglar, intent upon robbery, had obtained entrance to a bedroom, where the lady of the house, awaked from sleep by the noise of his movements, was intimidated from giving an alarm by his fierce threats of violence. Hearing footsteps approaching, the robber concealed himself behind the bed, first cautioning the occupant

that the least whisper of his presence would be at the risk of her life. The husband entered, unsuspecting of the fact that from his place of concealment the robber, with leveled pistol and finger on trigger, was breathlessly watching and listening. The situation was full of peril, more easily imagined than described. The least allusion to the truth might have been instant death to the beloved husband, and probably to the wife also. Now, it had happened that, in their younger days, they had learned the manual alphabet of the deaf, and had frequently since, as occasion suggested, communicated with each other by it. Unseen by the robber, the lady gave her husband, on her fingers, an inkling of the state of matters. He took in the situation at a glance—literally at a glance—and making a misleading remark about something he had forgotten to bring, he was out of the room and in a moment back again with firearms and assistance, and the burglar was captured, and robbery and possible murder prevented; and this by the manual alphabet, an accomplishment easily and carelessly learned years before, with no thought of its future employment in such an emergency.

This case, extreme as it may seem, only illustrates the general rule that in daily life circumstances are constantly arising in which there is an imperative necessity of saying something directly to the person most interested in a way not to attract too greatly the undesired attention of others, and of saying it quickly, perspicaciously, felicitously, without using the voice.

Writing is a medium of communication that answers these purposes at certain moments and on certain occasions. It is undoubtedly an indispensable medium where distance, exactitude of statement, future reference, extent of matter are to be considered. There is no need of enlarging upon this phase of its usefulness; it is universally acknowledged.

There are indisputably times and places in which the finger alphabet fulfills, as writing cannot do it, the conditions of expression where vocal utterance is either not desirable or not possible; where to use pen or pencil would be either an inconvenience, a waste of time, or a sheer impossibility.

How often at social gatherings—I am not alluding to the deaf in this connection—do we not see individuals, separated from each other by the crowd or the length of the room, vainly striving by bewildering contortions of the countenance or noddings of the head to convey a piece of information upon which may hinge the ease and pleasure of the evening. Repeatedly it must have occurred to the looker-on as he noticed the mortification or blank disappointment depicted upon their faces at the futility of their attempts to reach a common understanding, that the finger alphabet would have furnished them with a means of perfectly accomplishing that object without attracting undesirable attention by uncouth gestures or obliging them to make themselves conspicuous by raising the voice beyond the proper pitch.

Probably no one has ever left a promiscuous gathering of any kind without recalling an unfortunate moment made so by a lapse of memory or some misinformation as to the name, identity, or profession of a person interviewed, where the use of the finger alphabet on the part of a kindly disposed third person would have saved him from an awkward blunder.

In concerts where music has charms to still every other sound; in

the church where any other voice than that from pulpit or choir would shock the congregation from center to circumference; in the theater where the owner of a voice in orchestra or gallery finds himself the focus of a hundred lorgnettes, and again amid the noise and rattle of the machine shop, factory, or railroad, how often arises an imperious necessity of making a communication to another. How handy—old Saxon word this, but pat to the purpose, is it not?—how handy, at such times and in such places would come the manual alphabet, achieving the end sought for completely and without the least friction or disturbance.

Outside of the confessedly deaf, how many persons there are, who resenting with warmth the imputation of not being the possessors of a perfect auditory apparatus, are yet hardly ever addressed except in tones more or less raised above the conversational pitch. Often in certain situations the recollection of the fact that the voice must be thus heightened is an effectual preventive of anything being said at all. Thus timely, pleasurable, or valuable information has been withheld when the finger alphabet could and would have put it where it would have done the most good.

To the invalid and to the sick-room the manual alphabet comes, as it were, with healing on its wings. Has not every home its sick-room dedicated to the Goddess of Perfect Quiet; every family its invalid, a sort of living original of the marble statue of Silence, with finger forever on lip? How the sound of the human voice, be it ever so modulated and repressed, racks the ear of the nervous sick one. How the whispers of the nurse or the subdued tones of the physician startle him from the repose upon which his recovery depends, and turn his thoughts into channels that lead to apprehension and despondency. How perfectly, how beautifully, the manual alphabet performs its functions here; every weary nerve in the sufferer's body cries out, "God bless it." And again, on the other hand, when the invalid is incapacitated by disease or exhaustion from using his voice, what a solace to him and his attendants it is if he can still express his wants by the silent unlaborious motion of his fingers.

In this connection it is not out of place to refer to a more solemn subject—that of the deathbed. Some of you who have stood by the dying ere the soul had taken its flight, may recall—and with what feelings I will not say—that last appealing look and those vain endeavors of the departing one to express some final desire. It is a well known fact that the vocal chords give way long before the muscles of the hand; the dying man is "speechless," while his fingers move at will. How many last messages to be treasured thenceforth as a most precious heritage have been lost to the loving ones remaining behind; lost because the finger alphabet was not known.

Members of the family of Dr. Thomas Hopkins Gallaudet have told me that in his last moments such precious and ever to be remembered messages continued to come from his fingers after his tongue was paralyzed in death. The same may be said of the Rev. B. M. Fay, father of Professor Fay, of Kendall Green, who passed away last year; of Grace Aguilar, known to us through her "Days of Bruce," "Home Influence," and other writings, of whom the "Annals"* says: "In her final illness, when the power of speech was gone, she conversed with her friends in the manual alphabet, and her last words

* Vol. XVII, page 132.

thus expressed were: 'Though He slay me, yet will I trust in Him.'" Dr. Harvey P. Peet, in an obituary notice of Martha Dudley in the same periodical,* states the same fact as regards her last hours, and mentions at the same time how "Mrs. Peet, after she became wholly speechless, spelled with her fingers distinctly the word 'Mother,' which incident is commemorated in a touching little poem of Mrs. Sigourney, 'The last word of the dying.'"

Thus far I have mentioned only a tithe of the circumstances in which a knowledge of the manual alphabet would be an advantage—I may say, an immeasurable advantage—to hearing people. A moment's thought will suggest to any one so many further illustrations to the same effect, that there would not be space or time to mention them all.

I must, however, mention one more. The finger alphabet possesses acknowledged, and, in the opinion of those familiar with its use, an unequalled excellence as a means of education in orthography. The care and deliberation with which the letters are formed, and the concentration of mind that the process involves, insure precision beyond any other method.

At Kendall Green, and possibly at other places similarly situated in regard to schools for the deaf, where the hearing children of the locality are formed into little schools for private instruction, the finger alphabet has been practically and successfully tested in this respect. The teachers like it. "It makes the pupil so particular," they say. I have in mind now children of deaf parents, early used to this alphabet, who on entering public schools easily led their classes in spelling, to the wonderment of their teachers until the reason was explained.

Once more I have recourse to the "Annals":† "It was a favorite idea of the late Rev. T. H. Gallaudet, the lamented, illustrious pioneer of deaf mute education in this country, that the practice of spelling words with the manual alphabet, even by hearing and speaking children, might be made very serviceable to them, by familiarizing them with the correct orthography of words aside from the use of the ear. The principle upon which the idea is based we think to be this: The more varied the form under which language is presented to the mind through the different senses, the more perfect will be the knowledge of it acquired, and the more permanently will it be retained."

In view of the incontestably great usefulness of the manual alphabet to the hearing, and considering the comparatively little labor and time needed to acquire it, has not the day arrived when some determined effort should be made to adopt it into the public school system of the country? Should not this matter be urged upon the attention of teachers and Boards of Trustees of the public schools? Could not they be persuaded to hang charts of the manual alphabet on the walls of their school-rooms, with cuts large enough to be seen without effort from the farthest corner? Could not they be led to try the experiment of using this alphabet as a means of drill in spelling, instead of the present method of writing out long lists of words? The same course, by the way, might be found useful in recitations in geography.

Would not the school-room work move on in smoother grooves,

* Vol. V, pp. 78-83.

† Luzerne Ray, "Annals," vol. V, page 28.

with less jar to nerve and temper, if a pupil instead of speaking aloud and thus distracting the attention of others from their studies, simply spelled out on his hand a request or a question to the teacher? Would not the teacher himself feel more satisfaction in making a remark to a pupil in this way, having once caught his eye, than in interrupting the work of a whole class to do it?

The objection may be made that the result would be a demoralization of discipline; that pupils will have still another means of talking in school regardless of rules. To this, it might be answered, that there will always be more or less of this unauthorized interchange of ideas in every school-room; and that if it should be carried on through the finger alphabet there would be less disturbance than if any other medium were employed. But in truth, the teacher possesses a check on the abuse of the manual alphabet, in the fact that he is himself skilled in its use, and can tell what his pupils may be saying. A teacher in the high school, at Washington, informs me that all unlawful attempts of this sort ceased at once when his pupils found that their remarks were no riddle to him.

In keeping this matter within legitimate bounds, everything of course depends upon whether the teacher has tact, influence, character. Lacking these qualities, he has no right to be where and what he is. With them, he is sure of commanding the respect and obedience of his pupils for whatever regulations his judgment may lead him to make. Where the manual alphabet is employed, as it is in schools for the deaf, its use is under proper control. Why need the case be different elsewhere?

If, thus far, I have failed to expatiate upon the benefit—great beyond conception—that the introduction of the manual alphabet into the schools of the hearing would confer upon the deaf mute himself, it is because this is something that need only to be suggested to be recognized in all its force and extent. When we think how the general use of the manual alphabet would throw wide open the doors of communication between the deaf mute and the hearing—doors that now open with difficulty and close again almost as soon as opened; when with the mind's eye, we see the deaf child's intellect and heart unfolding from tender years in the sunlight of knowledge, under conditions more analogous to those of his hearing playmate; when we behold the deaf adult, wherever he finds himself, whether in places of business, in political meetings, in religious assemblies, in social gatherings, placed in perfect unison with his neighbors and surroundings; when we realize that he moves among his peers with no feeling of isolation; when we know that there may be more instances than heretofore in which "the charm of warming hands," but without the evil taint of the charm that Vivien wiled away from Merlin, shall knit together for life the heart of the deaf and that of the hearing, how can we as members of our noble profession, hesitate to give our vote, individually and collectively, for the general diffusion of the manual alphabet through the public school system of the country? No; let us not hesitate; let us not even doubt.

"Our doubts are traitors,
And make us lose the good we oft might win,
By fearing to attempt."

REV. DR. THOMAS GALLAUDET: I shall never forget the pleasure that beamed upon the faces of several deaf mutes in the fall of 1853,

when I met Rev. Bishop Wainright in the beginning of our enterprise in New York, when he held confirmation there, having confirmed some six or eight deaf mutes that afternoon, and as he finished the service stepped down and spoke in the manual alphabet, which he had learned as rector of Christ's Church, Hartford. A perfect thrill of joy went through that community as the Bishop came down, shook hands and spelled with them. And I remember an invalid lady of New York who took a particular fancy to my wife, a deaf mute, who learned the alphabet, and just at the end of her life she spelled the word "water."

PROF. E. A. FAY: In this connection I will call the attention of the members of the convention to a little volume giving the manual alphabet, and in which one whole page is devoted to each letter. It has recently been published by my friend and colleague, Professor Gordon, who I am very sorry is not able to be present. This book presents the manual alphabet in such an attractive and beautiful way that I am sure that any children in whose hands it is placed will not fail to learn it and be improved by it; and our object would be much promoted if this little volume could have a wide circulation among hearing persons.

MR. BOOTH: As a teacher, it is ever my purpose to enlist in the work of teaching my class everybody that I can outside of my school-room and outside of the institution. [Applause.] And to this end I have made it my practice, at the end of the school year, to give to my class and distribute among them, as many as I could afford to purchase, cards upon which are printed the deaf mute alphabet. Two years ago I procured a number of illustrated cards, printed and prepared by Armes & Co., of Philadelphia; and they were of sufficient value that my pupils when they went home could use them making presents to their friends. Being of intrinsic value and beautifully illuminated and lithographed, their friends appreciated them sufficiently to put forth some effort to learn the alphabet. So, in that way, also, the most of my intimate or their intimate friends learned the alphabet, and were able to communicate with them; and thus my pupils also enlarged their circle of acquaintances, perhaps. They certainly enlarged the number of pupils with whom they could converse freely. The end that I aimed at was that these people might assist me in teaching my class language. And I submit that there can be no better way than by conversing on subjects that interest my pupils, and that will bring into use language which will not be used generally in routine school work.

MR. T. L. BROWN, of Michigan: The papers which have been read have filled me with great pleasure, and I think that others have also been pleased. Hearing people may not care to learn the alphabet until shown the importance of it; and we should think what inducement we can offer them to learn it. I think a committee should be appointed to write out these reasons.

In a machine shop, amid the noise of machinery, where a person speaking could not be heard, they could use this alphabet with advantage. So, on the railroad, they could spell a message at a distance. I think a committee should be appointed to write up the subject and put it in the "Annals," making some allusion to this subject in the reports of the different institutions, and giving all the reasons. I do not believe in peddling these alphabets, but in giving them away freely, so that the people can get them. Deaf mutes themselves must

enter into the use of the manual alphabet with their friends, and not stand back and be diffident about it. I hope that the time will come when there will be few that do not understand the manual alphabet.

A deaf mute going into a store, it takes a long time to write out all his wants. If the clerk of a store understands the alphabet, then that would draw deaf mutes into the store and thus increase their trade. That would be another inducement for people to learn the alphabet. [Applause.]

REV. JOB TURNER, of Virginia: In my moving around in the Southern States I meet a great many people that use the double-handed alphabet. I find that to be quite a universal custom. As this is the case, I think that in the different institutions for the deaf and dumb the pupils ought to learn the double-handed alphabet also, so that they can converse with all. I think they should have practice in both, so that they can have the pleasure of such communication.

DR. GALLAUDET: In this connection I will say a word, lest it be supposed that in the earnestness and interest expressed now in reference to the finger alphabet, the fact may be overlooked that, in the constantly increasing numbers of the pupils of our institutions who learn to speak and read from the lips, the minds of some persons may form the idea that the manual alphabet is going to be of less and less importance to the deaf as time goes on; that, as a greater number of pupils learn to speak and read the lips, there will be less and less need of the manual alphabet to enable them to sustain the relations which they desire to sustain with those who hear and speak. I would like to assure any persons whose thoughts may be drifting in that direction, that it would be an error to suppose that even if the whole body of our pupils could be taught to speak passably well, and to read from the lips, that the manual alphabet would then have no place with them, and be of no service to them. Quite the contrary, Mr. President. It would be of very great service to them. And in my judgment every deaf child should have a ready knowledge and use of the manual alphabet; for circumstances arise not infrequently when its use, even to deaf persons who can speak and read from the lips, would be found of very great advantage. And in support of this assertion I will cite a case which came recently under my observation in Washington.

A lady whose home, I think, is in Wisconsin, who had never been a pupil in an institution for the deaf, but had lost her hearing towards mature life, and had lost it entirely, who had learned to read from the lips remarkably well, and who had always had speech, called with a friend at my house, and I entered into conversation with her. I said something which she did not quite understand, and she replied: "Won't you please spell it on your fingers?" I did so, and expressed surprise that she knew the manual alphabet. She said: "I am not one of those foolish people who have any prejudice against any good thing. I can read from the lips, it is true, generally very well. I can make myself easily understood with my speech; but I find often that I am a little at a loss, and then if I can have the help of the manual alphabet from those I am conversing with, I consider it a godsend." So she says: "I supplement my communication with others by the speech and by letter writing with the prompt and instant use of the manual alphabet, which helps me out of many difficulties."

And I can say further that there come within the circle of my

acquaintance not a few deaf persons who reject the manual alphabet on principle, they being speakers and speech readers. I know, by absolute observation and experience in my connection with such persons, that not infrequently there occur times and occasions when a resort to the use of the manual alphabet to make clear an obscure word, to help out an imperfect sentence, would be a great blessing and comfort, not only to the person who speaks the words from the lips, but to those who are communicating to such persons.

Therefore, I would draw attention to this fact, that while we, all of us, are encouraging, to the best of our ability and to the extent of the means at our disposal, the teaching of speech and speech reading to such of the deaf as can possibly be benefited, in doing so we must not think of coming to the time when we can dispense with the manual alphabet. In my opinion that will ever stand, so long as the affliction of deafness befalls humanity; will ever stand as an adjunct and means of communication worthy to be cherished, cultivated, and carried through to the very end of time.

DR. PEET: I will offer a resolution in connection with this paper, in order that we may make it practicable. I move that the Executive Committee of the convention be requested to publish this paper in the "Annals," and that they memorialize the Department of Public Education at Washington on the subject; and that the Principal of each institution in the United States be appointed a committee to memorialize the Department of Public Instruction in that State, to the effect that the recommendation of this paper shall be carried out in the public schools.

The motion being put was carried unanimously.

MR. C. W. GAMAGE, of New York: I have seen a great many people that use the double-handed alphabet, and but few who use the single. Why? It appears that the double-handed alphabet is more easily understood and acquired.

MR. D'ESTRELLA, of California: I was five years at the Art School in San Francisco. There were a good many ladies in school who could talk with two hands. I could talk in this way, but I did not like it. It would bother my work when I had some material, as charcoal, in one of my hands. Now, I tried to root out the double-handed by making some of them talk with one hand. I explained why it would be convenient, and in doing so, I showed in comical natural signs the disadvantages of the use of spelling double-handed. They, one after another, learned with growing interest how to talk single-handed. In the course of time some of them could talk not only to me, but also with each other. The Director expressed himself well pleased, for two reasons. The first reason was that it seemed to him that there was more frankness, freedom, and openness in silent talking than in oral whispering. The second was that as artist he could see and appreciate more life in the expression of emotions while they were talking than when they chattered and babbled.

There was another feature to the advantage of talking single-handed. When they would talk to me, I could look at their faces and notice some of them articulate as they were trying to spell the words on their fingers. This habit subsequently enabled me to read certain short and easy syllables on their lips.

MR. GEORGE, of Illinois: I have found in my experience that people can learn the alphabet readily but they cannot read the spelling of other people so easily. People can spell to me and I can speak

back. And I like that method of communication better than writing. I find that the double-handed alphabet is more common than the single. Many friends of mine who can spell with and read the double-handed cannot read the single-handed.

MR. JENKINS, of New Jersey: I am informed by one of the gentleman here representing the press that he learned the double-handed alphabet from the primer which he studied when at school. So the action recommended by the gentleman who read the last paper has been anticipated in this State.

MR. S. T. WALKER, of Kansas: I have never seen a deaf mute who did not understand both the single and double-handed alphabet. I should not discourage the use of the double-handed alphabet if our speaking friends preferred that. Our deaf mutes could surely talk with them if they could use the double-handed alphabet.

MR. BOOTH: I suggest that in order that we may secure a general and common form of communication among hearing people and their deaf mute friends that we consider which of the two should be abandoned and by which class. Inasmuch as the people who use the double-handed alphabet are largely in the majority, would it not be well for us who are in the minority to give up the single-handed alphabet and take up the double-handed? It would be an easy matter for us to do so.

MR. ELY, of Maryland: The difference between the signs in the double-handed alphabet as used is greater than between the signs of the single alphabet; and so as a natural result hearing persons are able to read the double easier than the single. And in conformity with general usage, would it not be a good idea for us to give up the single and take up the double-handed alphabet? Why not use both of our hands?

REV. GALLAUDET: I think we ought to put the double-handed out of existence, as the single-handed is so much more convenient, enabling us to talk with one hand while using the other for any purpose.

MR. WILKINSON then read the following letter from Homer B. Sprague, of Mills' Seminary, California:

MILLS' SEMINARY, ALAMEDA COUNTY, CALIFORNIA, July 17, 1886.

President WILKINSON:

DEAR SIR: In behalf of Mrs. Mills and of all the officers and teachers of this institution, I hereby extend to you, and through you, to the National Convention of Deaf Mutes now in session at Berkeley, a hearty invitation to visit Mills' Seminary at such time as may be agreeable to you and to them. With great respect,

Truly yours,

HOMER B. SPRAGUE, President.

Here the convention adjourned until three o'clock P. M. Sunday next.

FRIDAY, JULY 16, 1886.

NIGHT SESSION—NORMAL SCHOOL SECTION.

MR. S. T. WALKER, Chairman pro tem., called the meeting to order.

MR. WEED: The topics to be considered in this primary department are "Vocabulary," "Tense," "The Correction of Mistakes,"

"The Methods of Review," and then the exercises that have been found most profitable for primary teaching. This morning we exhausted only one of these topics, which is the first, "Vocabulary."

The next in order is "Tense;" I do not specify what tense. The exercises of this department will now be taken charge of by Miss I. A. Shrom, of Wilkinsburg, Pennsylvania.

MISS SHROM: I have a paper here prepared by Miss Mary E. Henderson (?), of the Illinois institution, bearing directly upon this matter of tense, which I will read:

"I teach the past tense first, with the exception of the verbs 'is' or 'are,' 'have' or 'has,' and 'love.' If one of my class is sick, I want at that time to teach the class to write, 'John is sick,' and not wait till he gets well, and then teach them to write 'John was sick.' It is not necessary to wait, however, until a member of the class becomes sick before teaching the verb 'is.' I have no particular time at which to teach the word. This term 'is' was first used in the Sabbath school—'God is good.' It was afterwards used similarly in reference to persons whom the pupils knew, as 'Dr. Gillett is good,' etc. Afterwards used in picture lessons, as 'I see a cat. The cat is on the floor. The cat is pretty,' etc. I would not teach the class to write 'Yesterday was Sunday,' before they had learned to write 'To-day is Monday.' I teach 'have' and 'has' at a time when a child brings something new into the school-room, an orange, for instance, or an apple. With small *speaking* children the verb 'love' is almost invariably used in the present tense. For that reason I teach it to the deaf and dumb in the present tense. It is much easier to teach the child to write 'I love Dr. Gillett,' 'I love my mother,' etc., than 'The girl loved her cat.'"

MR. ELY: I desire to ask Mr. Weed what tense he uses at the outset, and for how long.

MR. WEED: For the first two years I teach the past tense almost exclusively. In fact, I think it was in the third year that we introduced the present tense, both in its habitual and in its actual form. I am satisfied that there is more experience on this subject in the room than has yet been made manifest. If there are those here who have practiced both, confining themselves to the past tense in the first year, or giving the past, present, and future in the first year, we will be very glad to have the benefit of their experience.

MISS PHEBE WRIGHT, of Michigan: In the first year I do not see how we can ask questions of the pupils without using the present tense. My pupils have been taught to ask questions in the first year; and I cannot see how they can be taught to ask questions in the past tense.

MR. WEED: Let me illustrate the manner in which it was conducted in the class to which I referred this morning. Take the word "see;" and supposing that only the past tense has been taught. I would say "John saw what?" That may be called an unnatural way of putting the question. You would prefer to say "What did John see?" Is that the point?

MISS WRIGHT: That is not the exact point. In the first place I would have John stand up and see something, and then he would spell, "I saw a bird." Then I would turn around and ask the question.

MR. WEED: I would ask, "John saw what?" The attention of the child is fixed upon the object and he simply answers, "A bird;" and

he has now a complete and a correct sentence. If you raise the question whether there is any trouble in the transfer from that form to the other, I should answer none whatever. For the first two years the questions are asked in that form. All that the child is asked to do at the beginning is to substitute a bird for the "what." The teacher has given the whole sentence except that one word. The answer contains the substitute, and the sentence is completed. By adopting that form of question you can confine yourself to the past tense for the first two years. When the pupil comes to write his compositions, as the most of his stories are in the past tense, that is the form in which he will write them. If there were time I should be glad to present this evening compositions written at the end of four and of six months, in which there is scarcely a mistake, which is partly owing, I think, to this form of using the verb.

MR. GRADY, of California: What distinction do you make between regular and irregular verbs? For instance, what is the change from "saw" to "see?"

MR. WEED: We have only one past form. It is only the simple past tense—the one form of the verb "saw." For the first year I would simply teach "saw," and not the present tense at all, so that the idea of the pupil is associated with only three letters, "s-a-w."

MISS WRIGHT: I do not see that my question is answered yet: What are you going to do with the child that asks the question? You certainly cannot have them ask the question in the past tense, and you do not teach the present tense; and what are you going to do?

MR. WEED: I believe I qualified the statement in regard to the perfectly uniform use of the past tense, and would allow the exceptions that are made in the paper read—the verb "to be," and perhaps "have" and "has," though my practice has been not to allow the use of them very much, because the advantage of clinging to the past tense seemed on the whole to be greater than the disadvantage of excluding the verb "to be" for the first year; that is, letting such ideas be expressed by signs rather than by language, so that the verb shall, without modification of its form, express but a single idea.

MISS SHROM: I ask Miss Wright to please give an example or two of the form of question she has in mind at present. A great many questions, I think, can be stated by using the past tense already referred to.

MISS WRIGHT: Anything that is wanted in the school-room I have always required them to ask for, or if they may have it, whatever it is. As soon as they understand anything of language they are taught to ask questions, or to ask for anything that they wish; and, of course, it must be done in the present tense.

MISS SHROM: In that form the very verbs that are made exceptions here are brought into use.

MISS WRIGHT: I will take any verb that comes into use. I would not limit myself to any tense, but would use the present or the past.

MR. NOYES, of Minnesota: What would you do with a large class of exercises, which I think are very important, that of the whole class writing, while one is doing something? That is the way ordinary children learn language. When the sugar is passed at the table, the little child learns to say, "Mother, pass the sugar." We set the children to doing something, one of them, or the teacher, and the rest of them looking on and writing it. That is in the present tense.

MISS WRIGHT: I should certainly ask the children to give the ques-

tion themselves: "Please pass me the sugar;" and then the rest would write the same.

MR. NOYES: I think, if you are going to use exclusively the past tense at that very early period, that the child must become cramped, and his style stiff and unnatural. I think there is a tendency, at the present time, to learn language by the natural method, and not in the past tense; to have the child understand that while the thing is going on it should be expressed in the present tense. If there is any special reason, I would like to know it, why the natural method should be ignored in the case of deaf children any more than in the case of ordinary speaking and hearing children; why they cannot ask the question of you in the present tense, and not for the first, second, and third years in the past tense; and then, furthermore, why children may not be encouraged to read, as many of them do, in the papers, and in the little books, to catch up sentences in the present tense, and not be obliged to put them in the past tense. Why shall we leave the natural method, and confine ourselves to this particular form for the first and second years?

MR. WALKER: I call upon Mr. Job Williams, of Connecticut, to answer Mr. Noyes' question.

MR. JOB WILLIAMS: I do not know as I can answer it very briefly; but I should like to take a few minutes to answer it. In the first place, I would say this: that we may as well make up our minds at the beginning, that it is utterly impossible to teach the whole English language at one time. The great difficulty with teachers—especially with young teachers—is, that they are not willing to go slow enough. We do not realize sufficiently how very great the obstacles are, that are in the way of a deaf child learning language. We must start at the very foundation. The question is, how in the long run we can accomplish the best results; not what apparent results we can get into a week, six weeks, six months, or a year, but what is going to produce the best and most permanent results, to be the most solid foundation on which a child can build.

It is a good principle, and one to which we ought to stick closely, that we shall introduce difficulties one at a time. On that ground, the first year I would introduce but a single tense. You may say that is not natural. It is not as ordinary children talk. But the tense, whether it is present or past, used alone, is no tense at all to the child that is learning it. The incongruity is in your mind, and in my mind, because it does not conform to language as you and I use it. But it is a root idea in the child's mind, just as much as the sign, and that is all there is of it, until you begin to teach the child to distinguish between the present, past, and future. And so I say that I would begin with a single tense, the present tense, and would not teach the past tense, and for most important reasons. In the first place, the present tense contains the root form of the verb, and that is the form which you wish to stand by the child. Then, in the next place, the root form of the verb is used in more combinations than any other form. Take for instance, the verb "go," and we have, "can go," "must go," "will go," "shall go," etc.; and in questions, "May I go?" "Can I go?" "Do I go?" "Shall I go?" "Must I go?" etc. If the child is ever going to learn the use of the dictionary, when he goes to look for any word, it is the root form of the verb he must look for.

I will grant that a teacher may take the past tense, and may per-

haps succeed in the long run just as well. But I think it is better to fix in the mind of the child in the first place the root form of the verb, and do not take any other, because there are so many other difficulties the child must contend with. He has to learn nouns and the difference between the singular and the plural forms, pronouns with their different forms of case and number, adjectives and their office, adverbs and adverbial phrases—a great many things, for a mind entirely untrained, to remember. In addition to these, one form of the verb is better than more for a long time—the greater part of a year. So I would begin with nouns in the singular number. Next I would introduce the intransitive verb and get the shortest possible form of a complete sentence. On that I would build one step at a time, introducing in their order the transitive verb with its object, adjectives, plural forms, the possessive case, pronouns, adverbs, adverbial phrases of *place*, etc., but always demanding a complete sentence.

Adverbial phrases should always be taught as units: “A boy puts his hat *under the table*.” “A boy puts his hat *on the floor*.” In that way the child may be taught to write correctly as far as he can write at all; but it is all of the time a limited and cramped language. I know it; everybody else knows it; and it seems unnatural. But wait. You have a sure foundation upon which you can build. In the second year you can introduce adverbs of time; those come in with the past tense and the future tense. The child very quickly brings the three tenses which he has learned under perfect control to distinguish accurately the difference in time, and then he uses the adverbial phrases of time. The sentence is built up step by step; the child knows all of the time just where he is, and what he has done; and though he may not see all that you see in the gradual process, yet he has absorbed by this constant practice in this careful, methodical way, these forms of language, and they are his, and he will not forget them.

I know that years ago, when we used a great deal more miscellaneous way of teaching, the exercises of our pupils were full of “deaf muteisms.” We do not have one now where we had ten then. And I am perfectly convinced that by this careful, systematic building up of sentences, so that the child knows exactly what he can do and what he cannot do—and if an essential part of a sentence is left out he knows it just as quickly as you and I do—we shall secure a better foundation, and better permanent results than we can by any natural method, as you may call it, that can be found.

I know that by the natural method you will find a few pupils here and there will pick up words and phrases, and will seem to make astonishing progress in language. But they are not as secure of their results; and there will be only two, three, or four in a class that will make that progress. But if you have this careful, systematic way of building, you can take almost the whole class along with you, so that they will all have a secure hold on those forms of language. We must be willing to wait and build slowly and carefully. The more complicated forms will come in due time, and they will come surely.

MR. NOYES: I would not be understood as implying that I would, if I may use this illustration, take all kinds of fruit out of the basket and pour them into the child's mind, irrespective of any order; but I would encourage a child, if he was going into the forest, and was interested in looking at the trees, to learn their names. I would not

say to him, "There is an oak tree; and you must not know anything about any other tree than the oak there;" or, "There is a maple tree, and you must not have anything to do with that;" or a birch or an elm or a willow; but I would let him learn the names of as many trees as he was interested in. And if I felt that he was learning the names of all the trees in the forest I would try to have him classify them by their bark, and shape, and so forth, and by and by he would learn that one was an elm, the other an oak, the other a hickory, and so forth. To say that he must learn but just one kind of tree because he has not got far enough, is a stiff and unnatural method. You may say here is a child with a body to be built up; and he must eat nothing but meat and potatoes all of the time. That is not natural. He wants a variety of food to build up muscle, blood, sinew, and brain. And so with mind.

I think one difficulty in some of our schools is this: we begin, if I may speak, at the big end of the tree, and we try to teach the science of language, instead of waiting until the child has language enough so that we can show him where the science comes in. You cannot generalize until you have something to generalize. You want to know something about the names of different things, and to have enough material to work upon. I notice that our little children, and we have a good many Swedes, Danes, Norwegians, and Scandinavians in our State, mingle in the streets with other children, and pick up the English language remarkably quick. The parents will be four, six, or eight years learning the language, and then cannot speak as well as the children can in a year or a year and a half. How do they get it? They do get it, and they use it grammatically, too. They do not learn the present tense, and then by and by the past tense, and then by and by the pluperfect tense; but they pick it up from time to time and see it in its connection. And when they have this language, and they are put into school, they begin to distinguish between the past and present tense. And a child that has learned out of books, or in school exercises, will take great pleasure in picking out of a sentence, or out of a book, those verbs that are in the present, and those that are in the future tense. We want to give them something that comes naturally and easily, before we begin to philosophize and teach them grammatically.

I wish to be understood that I do not believe in trying to make a child classify all of the trees in the forest at once; but if a child is interested in a tree, let him know its name, and by and by when you can generalize, then do so. Let the children in our schools learn somewhat after the natural method of ordinary children in the acquisition of language. You will find that Indian children have just as peculiar idioms as our deaf children have. Some of you may have seen within the last three or four months a letter that appeared in the "Youth's Companion," written by an Indian boy sixteen years of age, a pupil in an Indian school. He was considered a boy of remarkable progress; and yet, right in that letter, you will find just as peculiar "isms" by that Indian boy who was never taught by signs at all, as you can find in the ordinary conversation of our deaf and dumb children in the first stages of their progress.

If you send your child out to learn the French language in the quickest, the surest, and the best manner, you put him into a French family. And you would not say, "Now, you will speak in French in the present tense for the first six months, and then in the past tense."

The minds of deaf children are very much like the minds of ordinary speaking children. We cannot expect to advance deaf children much faster than average hearing children. If it is a good thing for speaking and hearing children to learn Latin, French, Greek, or English in that way, why is it not good for the deaf and dumb? Their minds are very much the same; and we have observed in many cases that when they have had this opportunity, that they come out in as good a condition, so far as I am able to discover, as the others. I have worked under the stiff, cast-iron method, and have seen its results; and I have sometimes felt like asking the humble pardon of some in the profession to-day, who were my pupils, because I ground them through that method, the fault of which I know they now realize as much as I do.

I want deaf mutes to be free and easy, and learn things as their brothers and sisters do who can hear and speak. I think the rule which will apply to hearing children is not entirely deficient in its application to the deaf and dumb.

MR. WILLIAMS: In regard to this question of learning language by hearing children, and why deaf mutes may not learn the same way, it seems to me that the whole difference lies just in the fact of their difference of condition, and the consequent impossibility of having the same amount of practice. If, by any process under the sun, you could give the deaf mute child the same amount of practice that you can give the hearing child, there is no reason why that child should not learn language in just the same way, and just as correctly.

MR. NOYES: So far as it goes, why is not the practice of the deaf and dumb just as good as the practice of the hearing child?

MR. WILLIAMS: It is not, because if our hearing children could get no more practice than the deaf and dumb children get, they would not get language in that helter-skelter way. But we need to give them help, to cut off difficulties, and to make language as simple as possible. If you begin by teaching them by the natural method, you have a great variety of forms of construction right off. The child is perfectly bewildered, and very soon his language is all mixed up, and nothing is clear in his own mind or to anybody else. You may say that the other way is a stilted way. So it is; granted. The pupil's language will not be just like the language of a hearing child for a good while. But just so far as he goes, his language will be correct. He knows it is right, and others know it is right; and he can learn very quickly to express his ideas in accurate language. Now give him time to grow. Why do not mothers take young children and begin to feed them right off on meat and potatoes, sour apples, cranberries, and everything else? It won't do. It is not good for the children. But if you give a child a simple diet for awhile, and allow it to gain strength step by step until its physical powers get a little stronger, you may by degrees increase the variety and the child will thrive under it. I believe it is a good deal so with language. You cannot teach the whole of the English language at once. You may try but you cannot do it. [Applause.]

MR. CROUTER, of Philadelphia: Our pupils in the institution at Philadelphia have no form or style except as they are taught by the teachers. If they are taught the present tense, they will use the present tense. If they are taught the past tense, they will use that form.

I agree very much with Professor Williams as to the best method of teaching language to primary classes, except as to the tense. It is

our custom in Philadelphia to teach the past tense first; and we do it for this reason: In the past tense the form of the verb does not change. Take the verb "struck," for instance: "The boy struck the table," or "A man struck a dog;" the form is always the same. If you use the present form you say "strikes," or "is striking;" introducing difficulties with the present tense which you escape if you use the past.

MR. WILLIAMS: You do not need to introduce two forms of the present tense.

MR. CROUTER: I think of the two forms of the present tense I should prefer the other. You would say, "The horse eats grass;" the child would say, "The horse is eating grass." If I understand you, you would teach the child to say, "The horse eats grass."

MR. WILLIAMS: Yes, sir; it is merely a root idea in the child's mind, and nothing more.

MR. CROUTER: You spoke of the use of the dictionary. If the child was to turn to a dictionary for a root form, it would get "to eat;" it would not get "eats." You might as well give it "ate" as "eats," so far as the dictionary is concerned. And we prefer the past tense for that simple reason. And for another reason, that in our work we cling very much to action writing. The act is performed and finished in the presence of the child. It is not an habitual act. The act is finished and we give the correct form of the word at once.

MR. WILLIAMS: You ascribe to the child a difficulty which is in your mind, but which has no existence in his. To him the verb has only a root idea until he is taught to distinguish the different forms to express time.

MR. CROUTER: If that is all, we might as well give the past as the present tense.

MR. WILLIAMS: That is true; so far as that one point is concerned one would do just as well as the other, but there remains many reasons in favor of the use of the present tense.

MR. CROUTER: I agree, too, with Miss Wright as to the desirability of introducing very early the present form in asking questions. I think that is very desirable. I would, however, limit it, and would not attempt to teach a child all forms of questions. I would not think of introducing the future, the present, and the past tense all at the same time. I would use one first; and I would ground the child thoroughly in that one form. We use the past, and Professor Williams uses the present; that is the only difference. Then we teach the verbs, so far as asking questions is concerned: "to be," "to have," "to like," and "to love," and that is about all.

MR. NOYES: In your articulation work do you always confine yourself to those tenses, or do you teach just as ordinary children are taught in the public school?

MR. CROUTER: In our school, in Pennsylvania, we have two oral classes, so far as school-room work is concerned, and the same forms are observed as in the teaching of the pupils in the sign classes, although they are taught orally. The forms are almost identical, and the results are very gratifying.

I agree with Mr. Williams that it is very important to lay a firm foundation, and to let that be very simple. You cannot make it too simple. [Hear, hear.] The difficulty is that teachers give their pupils too many forms. They want to get over too much work, and the result is that the pupils, in trying to use those forms, in none of

which have they ever been sufficiently grounded, blunder, and we have the troubles and the terrible mistakes in the end.

MR. MCFARLAND: In this battle of giants upon this high and mighty plane I have not any theories. But I want to ask a question that continually troubles me. I wonder whether, in teaching language to deaf mutes, we are trying to make them acquainted with all the details of a vast and complicated system or mechanism of words, and the relation of all its varying parts as a science, or whether we are trying to fit these particular children to say, "I want some water," or to understand, "Bring me some wood," or "Where is John?" And I wonder why it is that so many children in the schools taught by this method or by that method, whether the past or the present tense may be used, get so dreadfully sick of their language lessons? Their slates are all chalked up every day, and they do not see why, and the teachers are never satisfied. They fix it over and over again, until the language becomes the terror of their lives, almost. It is simply because they are grinding with the bricks, and not putting up the building. A workman sitting down and squaring off each brick takes off so much of this corner and so much of that, because by and by it is going to appear up there on the corner. But he does not care very much about that brick. And I wonder why I find pupils from all of these schools, who have been three, four, or five years under instruction, by one or the other of these systems, who will sit down and write a note-sheet page about anything, and who, if they have been taught in the present tense, will perpetually write in the present tense. You may call their attention to the word, and they will change it and understand it; but that habit they have absorbed, and have become so saturated with the first forms that they got, that they will stay there forever, and you cannot rinse or wash them out. I wonder why these things are? I cannot see behind all these things, and I have no theories about it; but these things are perpetually coming up to me, and I wonder what the objection is to my taking a deaf mute child into my school, and beginning by writing on the board or spelling to him, to get him acquainted with the letters so that he knows writing and spelling; and telling him to bring me the slate, and then giving him by signs or in any possible way what I mean, and point out the signification of each word. It means something to him. He is doing something which he is interested in. He knows that he is to bring that slate; and that language represents to him precisely the thing which you want him to do. He understands that language, and he will stick to it. "Bring me something" always means after that, "bring me something." What is the objection to my doing that? Why must I set up before them a more complicated system of things, starting them in at one corner and say to them, this is the block you are to hew upon for the present? Why can I not teach them in the same way that I teach other children?

MR. CROUTER: You can do it.

THE CHAIRMAN: The time has now arrived for a change of subject. The next subject will be arithmetic.

MR. BOOTH: The work before the section will now be the development of the problem as it is before us in the class-room with a class of deaf mutes. Indeed, our entire work in arithmetic is the development upon the mind of the pupil, of the problem, and the teaching of its solution. And I may say, that though we spent considerable time upon notation and numeration this morning, I would not have

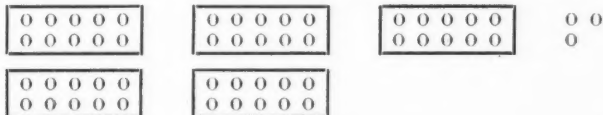
the impression prevail that all of notation and numeration is to be taught before the processes of addition and subtraction are begun. Notation and numeration should be a growth, brought out and developed by necessity; necessity existing in the solution of problems that are presented to the class, or to the child.

Addition and subtraction should be taught together, the one process as the complement of the other. The first problem presented—and all processes must be taught in problems—may be one in subtraction. It is a very easy matter for the teacher to make a mistake in teaching the simpler processes with numbers, resulting in a total misconception on the part of the child of the nature of such processes. It will not do to subtract two things from five things and leave three things, the child looking on and seeing in succession, the five things, the two things, and the three things as they may be pointed out to him. No problem has been presented to him, and he has solved none. Figures may be shown and taught as representing all that has been done and seen; if so, so much the greater is the mistake. The proper presentation of the problem will show clearly and positively the existence of the unknown quantity, as also the purpose of the problem to determine it. To this end, some art must be exercised by the teacher.

Presenting the problem, two from five, how many left? the teacher will show the five things and cover them; he will then expose two of the things and take them away. The desire will at once become general to know how many are left under the cover. The art of computation will be brought into exercise, and the unknown, or unseen, quantity will be determined. This is subtraction. It cannot be explained; it can only be seen, and being seen, it may be understood. It is a game, and it will be entered into with all the interest and zest of which the child nature is capable.

Addition is taught in the same way. The known quantities will be seen, leaving the unknown quantities unseen and to be determined. All the combinations with smaller numbers should be taught thus in problems, and as mental exercises. Figures should not be used by the pupil, unless to indicate the "answers," until the processes become so complex that the mind fails to retain and follow them. Figures, and operations with figures, may then be taught with little danger of misconception of their meaning and their purpose.

Using the decimal system of grouping or bunching quantities, it is a comparatively easy task teaching "carrying" in addition and "borrowing" in subtraction. It will be sufficient, perhaps, to illustrate the latter. If it be required to subtract twenty-five from fifty-three; the quantity fifty-three will be shown as five tens and three ones:



Then it will be covered. As a quantity, it is known to every member of the class. Memory of the form, and knowledge of the character of the number, make the cover practically transparent. The quantity is approached with the purpose, clearly understood by all the class, of taking from it the quantity twenty-five. It may not all be taken at once; five will be taken first. Trouble is foreseen; there

are but three of the kind wanted. They are uncovered, and the impossibility of taking five from three is at once apparent. There is but one course open; it is to break up a ten. This is done. Five ones are exposed, and taken away. At this point the attention of the class is directed to the figure 5, and it is suggested that the quantity five (tens) no longer exist, that it has become four. This is perfectly clear, and all see it as necessarily true. The next step is to uncover two tens, and take them from the four tens that are known to still remain behind the cover. The conditions of the problem have been carried out, and it remains to determine the unknown—the so far unseen—quantity. No aid should be given further than this, and no suggestions should be offered. With a clear idea of the end in view, and a strong desire to attain it, the pupils may be left to the figures and their own devices to discover the way to such attainment. If they are ready for the problem, they will have no difficulty in solving it.

Carrying in addition may be shown as merely a process of bunching tens. No number higher than nine can be represented by our system of notation. Whatever may be the denomination of the units, as soon as they become ten they are changed to one of the next denomination larger.

After much practice in the processes of addition and subtraction, the combinations in figures may be taught in tables, though in most cases it will not be found necessary.

It is important that the problem be developed systematically. The problem exists in nature independent of text-book, and independent of figures used in the operation for its solution. If I have had any success in teaching arithmetic I attribute it to this, that I have required my pupils to illustrate the conditions of problems so far as it has been possible to illustrate them; and in that way figures are not only significant, but the operation with figures becomes significant of the process with numbers or with quantities.

I will speak of a few of the difficulties that are met with in teaching subtraction, in using figures alone, and I think your experience will confirm mine in what I may show you.

How often have we seen our pupils with such a problem as this:

$$\begin{array}{r} 102 \\ 202 \\ \hline \end{array}$$

Given them for subtraction, actually perform it, and have for a result 900?

It has been my experience, as, I think, it has been yours, in trying to get pupils to illustrate problems, that their working of them will show that they have an entire misconception of the process that the operation is intended to represent. And in order to show that, as it really occurs in our school-rooms, I will ask Mr. Spruit to act as a pupil for a few moments, and do just what our pupils often do when asked to show their understanding of the problems that they work. I will give to him, he being one of a class of fifteen or sixteen pupils, all acquainted with addition and subtraction, and able to add and subtract figures, the following problem: "Walter S. has nine blocks; if he gives away six blocks, how many will he have left?" I give my class that problem, and among them, Mr. Spruit, and he will work it on the board in the usual way.

Mr. Spruit wrote the problem upon the board as follows:

$$\begin{array}{r} 9 \\ 6 \\ \hline 3 \end{array}$$

We have no means of telling by that that he does not understand that as a process, and we are inclined to think that he does, and he may write a sentence: "I have three blocks left." Now, I, as the teacher, am a little skeptical, and inclined to doubt whether my pupils understand all of these operations that they perform so readily, and I ask the pupil to explain it with the blocks.

Mr. Spruit being furnished with the blocks, first counted out nine to represent the nine that Walter S. had; then counted out six more other blocks to represent the six given away; and counted out three more other blocks to represent the blocks remaining; refusing to take the six blocks out of the first nine.

This shows the meaninglessness of this operation as understood by the pupil. That is, it does not mean anything that is possible in nature.

MR. JOB WILLIAMS: What portion of the class would you expect to be as brilliant as that?

MR. BOOTH: If they had not been taught in the way I did teach, I think that the greater part of the class would be just about as brilliant as that.

MR. WILLIAMS: My experience does not agree with yours in that line.

MR. BOOTH: If the pupil is taught figures he will do something of that kind if he is required to illustrate. The pupil cannot be expected himself to see that six is one part of nine and that three is the other part. If figures could be made to somehow show that a part of nine was six and the other part was three, then to take away the six and leave the three, that would exactly represent the process that he really goes through.

This is the way that I should teach that. I will call upon Mr. Spruit again and begin at the other end. I would show him the nine blocks, the known quantity, because it has been seen; also another known quantity will be presented; and he is told to put both of them upon the slate, and he does so. The problem is presented; the conditions have been stated and acted out; and now comes the problem, the determining of the unknown quantity, which I will leave it to him to determine. He does determine it, and he is certain of the correctness of the result. Now, I submit that he knows just what every one of those figures represent; that they represent the quantities; and he understands at the same time the relations that these quantities bear to one another; and understands the process that has been gone through with, which is a process in subtraction. [Applause.]

Going back to addition, and beginning even with "2 and 2 make 4," I will ask the pupils to write what they see; that is, to put down figures to represent known or seen quantities. They see $\frac{0}{0}$; and I ask how many there are, and they reply 2. And I say, "Well, put it down on your slates somewhere, I don't care where or how." They put it down. Then they say, "How many?" "2 more?" "Well," I say, "put them down." And they put down $\frac{0}{0}$; and they all see that 2 and 2 make 4. I show by my face that I want one expression

for the whole quantity; and they write 4, and they say 4; and that is the problem solved.

In teaching the addition table, I would not set the tables for them to memorize. I would teach the tables, but I should require them to make them; and should require them to determine the complementary quantity and character in this case; and so through. I should require them to make all of the details in addition, subtraction, and multiplication. I should require them to discover them, and if they lost or forgot them, to rediscover them. Then they know the process of addition, of subtraction, of multiplication, and of division.

I have not yet spoken of carrying in addition, and it would seem almost unnecessary to do so, having shown borrowing in subtraction; because carrying in addition is simply the reverse of that. But it is easily shown with splints. I, in my class, have a great deal of writing of problems. I perform an acting problem before them, and they, seeing me, write the conditions as they see them.

A MEMBER: Do you require any written solution of the problem?

MR. BOOTH: No, sir; I do not. I require them to illustrate a problem by simply writing it upon the slates, such as six blocks from nine blocks leaves three blocks.

MR. CONNOR: How long do you carry on this illustration, to the point that you go directly to figures?

MR. BOOTH: If I am satisfied that my class understand thoroughly the processes with numbers, from that time I allow them to use figures to represent that process. I do not require them to illustrate after I am satisfied upon that point.

A MEMBER: How long has your experience proven to you that you would have to continue teaching in this way before you could drop illustration and take up figures?

MR. BOOTH: My present class I took at the end of three years, and have had it three years. It was three years old when I took it. I have had to use these splints but a very few times; about two months, perhaps. But I require them in all their problems in multiplication, and in division especially, to illustrate them by splints and by marks; principally by marks upon the large slates. This method of illustrating is the development of the last three or four years in my experience in teaching, and three of those years have been with this class, which is a comparatively advanced class. I have used the method with younger classes, but to a very limited extent.

MR. W. R. ARGO, of Kentucky: I cannot agree with the gentleman as to the solution of the problem. In our school we would consider that a boy could not work an example at all if he could not explain every part of it. And if a boy comes with the figures upon his slate, and the correct answer, but no written explanation, we send him back just as if he had not worked the example at all, and we give him a zero for it. We consider that if a boy cannot explain what he has done, and cannot explain it in good English, that he does not understand it. I have been very glad to hear Mr. Booth upon notation and numeration, and have fully agreed with him in everything so far; but in this I cannot agree with him at all.

MR. BOOTH: My experience in that respect and in that connection is this: That if I attempted to teach the forms that are usually taught, and that must be taught, that they learn those forms in a mechanical way, and learn to use them in the same way.

MR. ARGO: In a case of interest or insurance, some very compli-

cated example, how could the pupil indicate all these operations with blocks, or splints, or any other sort of appliances?

MR. BOOTH: He cannot do it. When you have arrived at that point, the pupil has acquired the ability to use the figures. I have pupils in my class who have never been taught interest excepting as I have shown it to them in connection with my own business. If I have loaned \$100, and have a note for the same, I show it to my class, and tell them something about it, and they see the amount of interest that is earned; and I tell them that I get for one dollar ten cents per year, and explain it in that way; and they are able to work problems in interest—at least they have worked problems in interest without any special instruction in mechanical processes with figures—in computing years and months, but not days.

MR. F. D. CLARK, of Arkansas: It has been a long time since I have taught elementary arithmetic, but I have had a great deal of experience in beginning classes with fractions. I started out by putting upon the slate, for example, three quarters of a pie, and the boy would go through a form something like this: I would ask him what that meant; and he would tell me that the figure 4 showed how many parts it was divided into, and the figure 3 how many of those parts were taken. And I thought he understood that fraction pretty well. But after awhile I found that some stupid boys could not get that form even; and I drew a line, dividing it for them, and then asked them if they could come up there and show me three quarters of that line; and I very soon found out that many of the boys could not do it. They could go through with this analysis, and tell all about it in language; they could tell which was the denominator, and which was the numerator, but when they came to showing the thing itself, they could not do it. For my own part, I had rather have the explanation that Mr. Booth has given there than a page and a half of the best language a deaf mute ever wrote.

MR. ARGO: I had rather have both; and I would have both or nothing. [Applause.]

MR. BOOTH: We can judge of the method by its results better than in any other way. I will relate an instance in my class. Two weeks ago, just after examination, we had no lessons, and I went into the study in the evening to give them something to keep them busy, and I gave them two problems in arithmetic to be done upon paper. One of them did not have any paper or pencil, but performed the problem mentally. The problem was: "A man had two hundred peaches for which he paid \$2 50. He sold one half of them at the rate of two for five cents, and the rest of them at the rate of four for five cents. How much did he get, and how much did he gain?" In two or three minutes that girl had worked that problem mentally, and had given me the answers; and I had to take paper and pencil to work out the problem to see whether it was right or not. I found that it was right. I say that by this method of teaching arithmetic that I have so far presented, they learn it as mental arithmetic. Indeed, all arithmetic is mental arithmetic.

MR. WALKER: How many pupils arrived at the right solution with the paper and pencil?

MR. BOOTH: I did not count, but I think two thirds of the class of sixteen. I may say that the problem that I gave this forenoon was worked by a girl who had been in school four and a half years, and

had studied fractions only since the term examination—about two months.

MR. WALKER: Are you certain it was no guess work?

MR. BOOTH: I would like to have somebody guess out the two answers. I know that she understood it. I knew the girl, and that I did not need to ask her if she understood it. She could take that problem and illustrate it; and the problem is quite involved, and the girl is a deaf mute who has been in school six years.

MR. T. L. MOSES, of Tennessee: Do you mean that that young lady thought out two hundred peaches, and then separated them into groups of one hundred, and then separated those groups of one hundred into the groups that you named there, of two each, and then next the one hundred into groups of four each, and that all of them had to work out that problem?

MR. BOOTH: I do not pretend to say that I can follow the reasoning process that the girl used.

MR. MOSES: Do you think she pictured two hundred peaches in her mind?

MR. BOOTH: No, sir; I think she saw the relations just as we do, and performed the example mentally just as we do, having arrived at that ability through this method of instruction.

MR. MOSES: In your experience how many objects can a child's mind grasp and see and understand at a glance, or at one time?

MR. BOOTH: I have not made any study of that.

A MEMBER: Do you believe a child can go above ten?

MR. BOOTH: I have no doubt of it, presented in that way.

MR. MOSES: Fifteen?

MR. BOOTH: No, sir; but the child sees seventy, by this method, just the same as it sees seven, or seven hundred—seven of these great groups, in just this same relation to each other.

MR. D. L. ELMENDORF, of New York: To illustrate in regard to taking in those groupings at a single glance, it is a physiological fact that nobody, with one or two exceptions, has been able to take in more than seven irregular objects at a glance. But if things are arranged in order, they may be taken in to almost any extent, with some practice. Of irregular objects placed upon the blackboard I doubt if there is any one in the audience who can take in more than six at a glance.

MR. WILLIAMS: Is not that a matter of practice? Cannot the eye be cultivated?

MR. ELMENDORF: No, sir; unless you put them in some particular order. Take a counting frame; a person looking at it, and knowing that there are ten on a line, will take in one hundred or five hundred or a thousand, but I do not think you can take any more than six irregular objects.

MR. WILLIAMS: I should doubt that, and, as evidence to the contrary, I once knew a gentleman who was very anxious to cultivate observation in his little child, and, in order to do that, he was accustomed to take him in his arms and carry him past a shop window, without stopping at all, and making him mention everything he had seen. At first the child would see but a few things, but by constant practice he could see and name almost everything there was in a window that he passed by, at a casual glance.

MR. ELMENDORF: That is an entirely different thing. While he

might be able to tell the names, he could not tell how many there were there.

MR. WILLIAMS: No, sir; but he could name over a great many different things.

MR. ELMENDORF: But he did not take them in at a glance; his eye followed them.

MR. WILLIAMS: Then you think that to grasp accurately more than six things is impossible?

MR. ELMENDORF: That is what the different physiologists have stated.

MR. CROUTER: I think it would be better for us to have an evening session to-morrow night, and if we can come back then and hear Mr. Booth upon the subject of arithmetic, I think it would be for our interest to do so. I would like to say, in regard to Mr. Booth's method of instruction, that I know it to be very successful. He has pursued his method by the side of the usual method of teaching arithmetic, for the last two or three years, and I need not say with the very greatest success. [Applause.] It is simply teaching arithmetic through the sight, just as you teach language, and the pupils understand what they are about.

The motion was made, seconded, and carried unanimously, that there be an evening session to-morrow for the consideration of this subject, at half-past seven.

Here the department adjourned.

THE EXCURSION.

The excursion of the National Convention of Teachers of Deaf Mutes, in session at Berkeley, last Saturday, was a success in every particular, and the visitors were delighted with all they saw during the day. The members of the convention boarded a special train at Dwight Way at nine A. M., and were taken to the mole, where they embarked on the ferry steamer *El Capitan* and steamed out into the Bay towards San Francisco. Skirting the city front of that city, they had a splendid opportunity of viewing the ever varying aspect of the city from Market Street to Black Point, where they ran into the first misty veil of fog that was floating through the Golden Gate. Circling Alcatraz, the steamer ran under the long silent, half-dismantled parapets of Fort Point. Here the fog was so thick that it was deemed unadvisable to make a further excursion in the direction of the Pacific Ocean. The northern shore was then skirted from Saucelito to San Rafael, around Red Rock to Hunter's Point. It was now half-past one o'clock, and at the suggestion of Mr. Wilkinson, the steamer ran into the slip and the party went ashore, breaking up into parties and visiting Chinatown, the Chinese theater, Palace Hotel, Nob Hill, the jewelry stores, and other points of interest, making small purchases and otherwise enjoying their "run ashore." At the proper time all of the party were on board and the steamer returned to Oakland. A band of music accompanied the excursion, and dancing was indulged in. A substantial lunch was served during the day which was thoroughly appreciated by all who partook.

All see at a glance that the product is one hundred and forty-four. The partial products, and their sum, will be shown in figures:

$$\begin{array}{r} 12 \\ 12 \text{ times} \\ \hline 4 \\ 20 \\ 20 \\ 100 \\ \hline 144 \end{array}$$

In time, this may be shortened to:

$$\begin{array}{r} 12 \\ 12 \text{ times} \\ \hline 24 \\ 12 \\ \hline 144 \end{array}$$

And it will even be shortened to the combination of the multiplication table:

$$12 \times 12 = 144$$

The pupil may learn to multiply mentally, thirteen by thirteen, thirteen by fourteen, fourteen by fourteen, fifteen by fourteen, and others of the simpler combinations, by seeing a mental picture of the hundreds and ten products, and combining them. This method of illustration may be used in the multiplication of larger numbers:

[illegible]

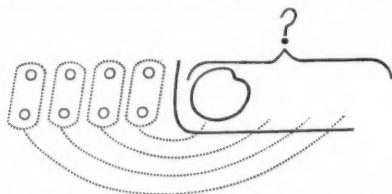
The product, as may be seen, is three hundred and fifty and ninety and fifteen; or, expressing it concisely, four hundred and fifty-five. Representing the process in figures, we have:

$$\begin{array}{r} 35 \\ 13 \text{ times} \\ \hline 15 \\ 90 \\ 50 \\ 300 \\ \hline 455 \end{array}$$

In this the significance of every figure is obvious. As the numbers grow larger, and the difficulties of illustration increase, the necessity for it will cease to exist. The significance of place will be well understood, and principles will have become well established, and the pupil will have acquired ability to reason and to generalize up to a mastery of the more complex processes. There are two kinds of division: one in which the divisor and dividend are numbers of the same denomination; the other in which the divisor indicates the number of parts to be made of the dividend. The former is subtraction (subtraction-times), and should be taught first. The latter is factoring, and should not be taught until the former is thoroughly mastered.

Care should be taken that the purpose of division is clearly understood. It should determine something that all want determined, and that all see may be determined. As in all processes, the unknown quantity will be the missing keystone to the arch; it will be seen in its relations to the known quantities; will be sought for intelligently; and when found will be recognized as the thing sought.

Problems presented should first be solved without the use of figures:



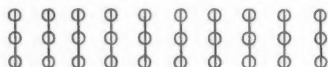
The problem thus presented would read: At two cents each how many peaches may be bought for eight cents?

The purpose of the problem being clearly understood, a mechanical operation with figures may be taught as representing the operation performed:

$2 \overline{)8} (4 \text{ times.}$

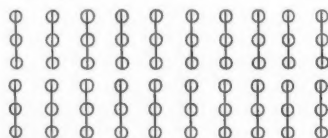
Care will be taken that the relation that two (2) bears to eight (8), and the relation that both bear to the quotient, are clearly perceived; otherwise the three figures will be thought to represent three independent quantities.

The division of tens and hundreds will be taught by illustration:



It is clearly obvious that three is in thirty ten times. It is something that cannot be explained. It must be perceived as a fact. In the same way it will be seen that four is in forty ten times; five in fifty ten times, etc.

The division of sixty by three will be illustrated:



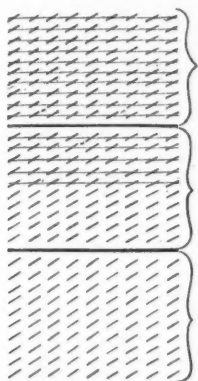
The quotient is obviously twenty.

Dividing three hundred by three, it will be illustrated:



Before the process has progressed far, the result will be anticipated. It will be seen that the quotient must inevitably be one hundred.

The division of three hundred by fifteen will be illustrated:



The quotient is in this case twenty.

By this method of illustration the pupil sees the relations that exist between quantities as necessary relations, and in the solution of problems he will learn to see their conditions as consistent with them.

The various forms of problems will be taught as language lessons. A new form will be presented with real conditions, using things in the new, but perfectly natural, numerical relation. The inevitable unknown quantity will be seen to exist in its relation to the known quantities. It will then be required that what has been seen shall be expressed in language, a question being written finally, asking for the unknown quantity.

There is no language so exacting as numerical language, and it may be said there are no ideas that are so clearly defined and at the same time so intimately related as are ideas of numbers and their processes. The effort should be made to bring into perfect accord the ideas in the mind of the pupil and the language used for their expression.

All problems presented for solution, so far as it may be expedient, should be illustrated by the pupil, showing that he understands the conditions involved, as also that he perceives the numerical relations existing among the quantities. This is, practically, mental arithmetic, as a problem may be solved without the use of figures. Some test is necessary other than a correct operation in figures. The illustration of the problem is a severe test; it shows in the concrete exactly what the figures represent and what the conditions express, and at the same time it makes significant every step of the operation in figures as representing a clearly understood process with numbers. As was said in the beginning, the method teaches numbers—the science of numbers and the art of computing them—by the use of numbers. The pupil learns to use figures and operations with figures merely to represent what he already knows as numbers and their processes. He never uses figures unless he knows their meaning and their purpose; he uses them because they are useful, always as a means to a clearly perceived end.

Understanding the relations of numbers in their various processes, he is never guilty of the absurdity of "subtracting" the figure 2 from

the figure 1 and getting the figure 9 for a "remainder," nor does he, put to the test, maintain that 109 and 901 are equivalent. Numbers exist for him as real things to be dealt with, and figures represent them. The problem becomes the familiar story, the conditions of which are verified by experience or are seen to exist consistent with possibility.

I am, in all this, developing the problem. I use, throughout the course, this system of developing the problem by presenting real conditions first, and the pupil gets acquainted with the processes with numbers, so that it becomes, as it were, a life experience to him. Teachers are all complaining of the great difficulty pupils have in understanding the language of problems. If they know these processes with numbers, the language is easy, because the language simply fits these processes with numbers, these conditions that they are familiar with, that are experiences to them. I say that they understand the problem written just as they understand a cat and mouse story; simply because the language expresses something that they can picture as an experience, or as a combination that they make. The language expresses something that is a part of their life; that they can verify by their experience. The trouble is, not that the language itself is difficult, but it is the numbers, or the figures, that are difficult. They do not know what the figures really represent, and they do not know the relations in which the quantities, with the figures representing them, stand to one another. I say that they must understand the relation in which the quantities stand to one another, just as they understand the relation in which the hunter and his gun the squirrel and the tree stand to one another, as an experience, in order that they may verify the idea that the language is intended to convey. And if they have had this experience they can do so intelligently. And so I say, when you give these illustrations over and over again, all manner of them, they have no difficulty in reading and understanding the problem, no matter how involved the language may be. I gave you a problem last evening in which the language was involved, and which did not contain any words that I saw would suggest the operations to be performed.

How many times have we asked the pupil why he subtracted? How many times have they pointed to the word "left?" They think that wherever they see the word "left" in the problem it requires subtraction. And where they see the word "at" they multiply. And they have catch words as we know. Where they see the word "each" in a question they divide. They are the key words to the operation to be performed, and the deaf mutes are very quick to catch at these key words to determine the operation to be performed.

MR. D. C. DUDLEY: Do you find any difficulty in illustrating promiscuous problems combining the four rules?

MR. BOOTH: None whatever. Of course, a difficult problem is difficult, but in the sense you mean, I do not.

MR. DUDLEY: I have often found pupils who understood the four rules perfectly, when separated, but when all combined in one problem, they are at sea.

MR. BOOTH: I should not teach in that way. I should teach both processes together. I should give them problems promiscuously, as you say, giving them problems in addition and subtraction—one or two in each—without any hint as to the operation to be performed. But when I give them problems throughout the course—in fact, when

I desire to draw out a new process with quantities and numbers—I require them to illustrate. If the problem is five times one sheep, I illustrate it in this way:

o o o
o o



That makes it realistic to the pupil. He can see there the real sheep, and he will have less difficulty in understanding it than if you put it "five dollars." I teach these different processes, or operations, entirely separate.

MR. M. T. GASS: Would you teach, in connection with multiplication, division also?

MR. BOOTH: No, sir; I should teach addition and subtraction together; that is, about the same time.

MR. GASS: Would it not be easy to teach that four times four are sixteen, and four in forty makes ten?

MR. BOOTH: I would have no objection to that, but I do not like to present too many difficulties.

MR. GASS: Don't you think that combining the two would often-times facilitate the teaching of these operations?

MR. BOOTH: Perhaps so. But I would teach addition and subtraction first, and get my pupils thoroughly grounded in those two processes, because multiplication is nothing more than complicated addition. I must teach addition first.

MR. GASS: But division and multiplication are very closely related. One is simply a reversal of the other.

MR. BOOTH: I do not teach it so. I teach that division is "subtraction times," subtracting as many times as you can until the quantity is exhausted.

And then there is another kind of subtraction that is altogether different from that. In the case of 300 divided by 3, it is very clear that it is "subtraction times."

Coming to fractions, here is the teacher's opportunity. If he has never taught numbers before, and has taught nothing but figures, or if the teacher who preceded him has taught nothing but figures, here is his opportunity. You can go back and teach simple numbers. After the class has learned operations with figures in the four rules, it is almost impossible to teach numbers to them. But when we come to fractions, this is our opportunity. We cannot only teach fractions, but we can teach simple numbers. What do we do? When I write the problem, the conditions of which will require the use of this part of a unit [one half,] whether it is apples or anything else, I will show to the class this half of a paper disc. [Showing.] I take the circle as my unit, because the arc of a circle suggests the unit. I take this in preference to a straight line, simply because there is no way of determining whether the straight line is a whole line or a half line. A straight line does not suggest a unit. I have used straight lines, but now I use circles, in which the unity is obvious to a deaf child. When a straight line is represented to him, he does not know anything about a whole unit, but when he is shown half a disc he does, upon its first presentation. You cannot explain it, but he must see it as just what it is. Then I tell him, without explaining why,

that this character $\bar{2}$ represents this shape \triangle . Of course it is relation; but to the deaf child it must be taught as representing shape.

Then I will take this shape \triangle , and teach them, at the same time, that the sign $\bar{4}$ is intended to represent it. And whenever I do anything that calls for that shape I shall require him to write that sign, $\bar{4}$. Then it is practice, and difficult practice, to drill the judgment. In this way they learn that the figure 2 under a line indicates a half, and the figure 4 under a line indicates a fourth. And all of the class have learned that in a few minutes.

They having arrived at the ability to make a distinction between quarters and halves, I will ask them to represent two fourths, and they see that it is necessary for them to take up two pieces of this shape, \triangle , and then I change the fraction to three fourths, and ask them if they know what that means, and many of them will pick up three of these pieces. In this way they have learned that the figure 4 under the line signifies that peculiar shape, and that the figure 3 indicates how many—the denominator and the numerator.

Having gone so far, we then teach addition, subtraction, and multiplication of fractions. The process of addition is the same in fractions as it is in simple numbers. I give two of these papers each representing a fourth of a disc, to one pupil, and three to another, tell them to put it down on their slates, and they will put it down, $\frac{1}{4}$ and $\frac{3}{4}$. I will ask them how many there are, and they, seeing it is addition, will put down $\frac{4}{4}$. They never think of adding the denominators, though I have never taught them not to. They have simply added the numerators. The numerators are significant of just what is added; the denominators signify just the size, and the size remains the same. Subtraction is taught in the same way.

A MEMBER: Do you ever write the word "denominator?"

MR. BOOTH: Yes, sir; sometimes.

MR. BOOTH: The following question is asked me, taken from the question box: "How long can the teaching of arithmetic be safely deferred?" It can be safely deferred quite a long time; that is, the time of the teacher can be given to the teaching of language a year, perhaps, before arithmetic as a subject of instruction is formally introduced. Of course the names of numbers, as adjectives, could be used in association with things, as it would be necessary in language, but I think it would be better to spend all of the time of the class upon language, rather than half the time on arithmetic and half the time on language. At the beginning of the second year I teach addition and subtraction, and the third year I teach multiplication and division.

MR. GOODWIN: In illustrating fractions would it not be well to vary the illustration, sometimes showing a ball, or an apple, as the unit, and dividing it into halves, quarters, sixths, and so forth?

MR. BOOTH: Yes, sir.

THE CHAIRMAN: The next subject to be considered is geography. The section will be led by Mr. Weston Jenkins, Principal of the New Jersey institution.

MR. JENKINS: Mr. Chairman, Ladies, and Gentleman: In estimating the value of school-room work, we need to distinguish between instruction and education. We need to reckon how much of the value of what we teach is in the intrinsic value of the facts imparted,

and how much in the training, which the study gives to the pupil's mind, which will enable him to appreciate and classify facts, and deduce his own rules from the underlying principles.

It does not need to be said to this audience that the latter is the highest kind of value. But there are some studies in which the intrinsic value of the facts is so great, the practical use which can be made of them is so important, that we may disregard the mental training, I think, which the acquisition of those facts implies. For example, arithmetic. While Mr. Booth has very clearly shown, and while the experience of myself, and, I presume, of all other teachers of the deaf, confirms what he has shown, namely, that the congenital deaf, or those deaf from early childhood, can be taught arithmetic successfully by a mere system of nemonics, yet it is taught, I think, to hearing children, very largely, in a way that involves almost nothing in the way of pure education and mental training.

I think that the majority of hearing children who attend public schools and use the text-books prescribed, get a competent knowledge of the operations of arithmetic in every day life, without any clear comprehension of the principles involved. And if we could teach our deaf children more readily in that way—if we could give that practical knowledge of arithmetic in a way more expeditious than by an educational system like that of Professor Booth, I think we should be justified in doing so. And if I could, in the course of two years, teach my children by any of the systems in use in our public schools, to solve the practical arithmetical questions that would come before them, I should feel justified in doing so, and should prefer that method to Mr. Booth's. Not knowing such a method, I should be very glad to adopt the educational method.

Geography is, as a matter of fact, taught in most of the schools on the instructional rather than the educational principle. I think that a perusal of the most popular text-books will show this, and very obviously, taking the conditions that surround the children, that process may be justified. People want to know geography very largely as a matter of convenience—as something that is conventionally expected of them—just as we learn to spell. Really, what is the use of mastering all the intricacies of English or of geography? It is a conventional accomplishment. A person who cannot spell according to the standards, loses a certain esteem—he does not hold position as an educated person. And so people learn geography. They learn the statistical part of geography, because it is rather a disgrace not to know it. When allusion is made to Singapore, or Vesuvius, or Saragossa, or the Rhine, we want to have some idea of what is being talked about, just as people read popular books that come out, such as Darwin's *Origin of Species*, or one of George Eliot's novels, who have no real interest in those subjects, but read them merely as conventional acquirements. And so it is very largely with geography, as studied in our hearing schools; and, perhaps, it is worth studying in our common schools in that way, and for that reason. But I think that in schools for the deaf, if studied in that way, the game is not worth the candle. The limits of the attainable are too closely drawn to justify us in spending so much time in going through so much, or, as Sam Weller's sharp boy says of the alphabet: "in going through so much to get at so little." It can be taught, I think, so as to have an educational value. The Scotch speak of Latin and Greek as the "humanities," and geography, if properly taught, is, for the deaf, a "human-

ity." It can be taught so as to make real to him objects that he cannot see—places that he can never visit—and it may make his interest in the world of matter and of mind more vivid, his conception of it more real, and so promote his happiness and welfare. That, I think, should be the object in teaching geography.

As to the methods to be pursued, and as to the extent to which it is to be carried, I will state my views very briefly, and shall ask assistance and explanation of methods from the teachers who are interested in this subject, and who are having practical class-room experience in it. One great objection to the usual methods of teaching geography is, even with a hearing child, the taking of text-books and beginning, as they do, with a string of definitions, the child getting no clear conception of what the definitions mean, or really what the words are. I remember my conception of the Rocky Mountains. I conceived a wall of earth studded with bowlders, such as I had seen in my native hills, the size of a small shanty, inclined at an angle of forty-five degrees with the horizon, rising two or three miles in height from a level plain, with a breadth at the base represented by a pyramid, and extending in an unbroken line from Alaska's shore through the continent, until they began to be called the Andes, or something else.

We should begin by making these terms real to the child, and should begin with one's own immediate neighborhood. I think the most of our schools are in, or in the immediate vicinity of, a city. I would have my child's experience with maps begin with a map cut from the city directory. If he is shown, for instance, the institution grounds as marked upon the map, he will recognize it and other objects in the vicinity, and with a forty-foot tape measure, or a ten-foot pole, or something of the kind, he will get the idea of dimension, and the idea of direction, and the points of the compass, and estimate the distance from there to the State House or the City Hall. In that way he gets the elements of geography; he gets what we try to teach by definitions in the book from objects implanted in his mind. I will not give my ideas at large, as I find from conversation with a number of ladies and gentlemen here that they have honored recent articles of mine in the "Annals" by careful reading and understand my position, and can criticise it very intelligently; and besides, I desire to hear from others.

I merely indicate the error in the usual way of teaching geography, something that is not adapted to our children, and recommend the entire isolation of a certain class of facts which are put together in geographies from all other facts in the universe. Of course it is convenient for us to classify certain facts together as a sentence. But students are apt to get an idea that what is contained in a book is all there is about a certain subject. They do not get the idea that there are other facts related to them. They do not get the idea of the poet:

"Flower in the crannied wall,
I pluck you out of the crannies,—
Hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

I think that our children are tied to statistical description, of geography, as it is called, and then, if they have gone through the book satisfactorily, they are taught physical geography, and then, in a more

advanced stage of their education, they are taught botany, mineralogy, and so forth.

But it seems to me that in teaching our children about any locality, it is better to teach them all of the facts they are likely to remember, together, in a group, with present points of attachment for the grasping of new facts. There are many facts which are usually reserved for the higher text-books, which can be just as well taught to children in the intermediate grades, as they can to older people. For example, winds, currents, rainfall, and all that is usually classed as physical geography. The primary and intermediate grades are not supposed to know anything about it, and yet it is just as easy to remember as the soil and productions which are given in the primary geographies; and they furnish points of attachments for new facts. The pupil is more apt to remember, and more apt to join on something new that he may learn to a statement of those conditions, than he is to a dry enumeration of the products, soil, and climate.

Now, as to the means and methods that can be used in teaching in this way. I have found it convenient myself in teaching a class of mine to string all of these things together on the thread of the commercial relations of one country to another. I have found that anything new that the pupils get hold of or that I get hold of, I can string on and put in such a light that they add it to those that they have already learned, and make it their own.

As to the methods of illustration, there are many teachers in this audience who are familiar with and expert in teaching by the use of the sand table; and I should like to know what they have done in that direction.

MR. SPRUIT: We have a number of tables, the bottom made water tight, provided with a small flange an inch or inch and a half high running around the four sides; and this with a bushel or so of sand is about the whole apparatus. If we have a State or continent to represent, we model it as it would be modeled in clay for a blind pupil; clearing the sand entirely off from the bottom where the water is to be. Of course the sand is dampened so that it will stay in place where put. Then it is a very easy matter to pour in a quart or two of water to represent the seas and lakes and many little channels increasing in size from the top down to the bottom for the rivers; and put in a toy house or two or a dozen to represent a city; and perhaps a few twigs to represent a forest. Of course this requires a considerable stretch of imagination on the part of a pupil to transform this into a map or model of a State or continent. But with the aid and assistance of the teacher, he is able to do this in almost every case; at least it is much easier for the pupil to understand what we are trying to get at by the physical contour of a country when represented in this way than when represented merely by the colors on the map or on the wall.

We also use this to a certain extent in teaching physical geography. It is sometimes very difficult to make pupils understand how water gushes out in the form of a spring. But if the sand is piled up a little, and a slate put in and more sand piled on top of that, the slate being placed at an angle and the sand sloping up, the slate representing the impervious strata of rock; then when the water falls upon this hill or mountain and runs out in a stream below, he sees exactly how a spring is formed. A hint of this will be sufficient for you to see the many uses to which this sand table can be put. You can use it

not only in teaching geography and physical geography, but sometimes for arithmetic, and for various other purposes. It is a piece of school apparatus that we have found very convenient.

MR. JENKINS: I should be very glad if Miss Harris would explain somewhat her mode of teaching these branches.

MISS R. R. HARRIS, of Maryland: In teaching geography I do not believe in burdening the memory of the pupil with a long list of localities of which they will probably never hear after leaving the school-room. To avoid this, I have taken a "Cornell's Intermediate Geography," and selecting such matter as I thought best for general use, have prepared lesson papers for my class. These lessons have been printed and then distributed to the pupils, who use them in connection with the maps given in the geography, while preparing for recitation. When they recite the outline maps are used, the pupils pointing out each locality after he has stated the situation. They are very expert at this exercise. In connection with the geographical situation of important lakes, rivers, towns, etc., I also teach the productions of various countries and the occupations of the inhabitants. In doing this I endeavor to make the pupils understand that these countries, in many respects, resemble that in which we live; that they have an abundance of grain and fruit, as we see them in summer, or are covered with the ice and snow that the winter brings to us. In the same way I try to make them realize that the towns are much like those in which we have our homes, consisting of wide streets and narrow streets, public buildings, elegant residences, and squalid huts. To impress these facts upon their minds, I bring in specimens of the productions of the country under consideration at the time, whenever it is possible to obtain them. The pupils are allowed to examine and, if so desired, to taste them. Pictures of the important streets and buildings of a city make that city a real place to them, while the relation of some striking historical event or legend connected with the place serves to heighten the interest. I teach the names of the principal foreign rulers, wishing the class to understand that as we have a President and Governors, so in other countries there are Emperors and Kings. In this manner I endeavor to make the study of geography, so often considered dry and uninteresting, a live subject, full of interesting particulars. You would be surprised to see how much general information these pupils have acquired, in connection with the situation of towns, and the sources and general courses of rivers. I have neglected to state that I also teach the principal railroads of our own country, stating their length and the chief towns through which they pass. The pupils trace out the various routes on the maps, and become familiar with them as the great highways of travel and commerce. If a boy's father writes that he is going from Baltimore to Chicago, he can frequently tell me through what important cities he will pass. I have met with great success by the use of this method.

MR. ELMENDORF, of New York: I think that is geography, and I teach it in a similar way, using at the same time the magic lantern or stereopticon. I begin by teaching the geography of New York, asking a pupil if I sent him to Twenty-third Street, in which direction would he go. And if they want to go to the Academy of Design, I ask them if they have any idea where it is. I begin with objects right around me, things that they have seen, so that they get a slight idea not only of its direction from the place where they are at the

time, but they get an idea of the time it will take for them to go there, and what they will find when they get there, and what they intend to do when they get there. I begin in that way, and then I go to, say, Philadelphia, for instance. And I ask them where is Philadelphia. I begin by teaching the simplest divisions of the country first. I ask if any of the class have ever been there. I very rarely find one who has been in a city so far from New York, except those who come from other cities. Suppose there is one there, I get that child to tell me all he knows about Philadelphia; and then I bring my magic lantern to show them pictures of the city, and they get an idea that it is a large city, and the first thing they want to know is which is the larger, Philadelphia or New York; and I tell them and ask them which they think is the nicer of the two, and get them interested in that city, and ask them if they have any friend there. Then I show them photographs of the principal buildings. Take the City Hall, for instance, and ask them if they think it is like the New York City Hall. And I make them associate their ideas with things they have themselves at home; and I not only do that with home cities, but also bring in the magic lantern to illustrate these pictures by a perfect photograph of what they are going to see. The children, when they are through these studies, will be able to tell you not only where each city is, but something about the chief buildings, and upon what railroads they are and how many, and how much it will cost to go there, and how long it will take to go there. That kind of geography I believe in, for deaf mutes at least. I give this as simply an illustration. I do not wish them to say that Philadelphia is in the southeastern part of Pennsylvania, but I want them to know the location, so that if they desire to go there they can do so without very much trouble. I begin with home topics, and go abroad afterwards.

A MEMBER: I would like to ask Professor Elmendorf how often he uses the stereopticon?

MR. ELMENDORF: I show it to the young scholars about every three weeks. I only have geography three times a week, and I may show it to the geography class once a week for about half an hour, and show them pictures of one city. All of our rooms are so arranged that we can show it in the daytime. Our pictures are about three or four feet.

A MEMBER: Where do you stand when you explain this panorama?

MR. ELMENDORF: I teach orally, and I stand right against the wall, where there is some light from the picture thrown upon me. In this way I show every important city in the United States that I think it is necessary for them to know.

MR. CONNOR: One of the great difficulties that I have had is to get the pupil to understand that a map is an outline of a section of country. They are disposed to look at it as a piece of red, blue, and green paper hung up on the wall somewhere. In order to get that idea out of their minds, my plan is to take a map and spread it on the floor, and place the points of the compass upon it. I think that is very important, that the child may get correct ideas of these things, and understand that the map is intended to represent something tangible.

MISS DUTCH: I think one good way to accomplish that is to have the children occasionally draw maps from memory; to take their slates and give a rude outline of the localities of the different States,

and their relation to one another. You will be surprised to see what accurate ideas the pupils will sometimes have of the States, and their relation to each other. I also ask questions, such as "Who sits north of you?" "Who east?" "Who northeast?" etc.; and "Whose room is north of this one?"

MR. Z. F. WESTERVELT: I think there are many of us who have not magic lanterns or stereopticons, who can make use of pictures with very great advantage. One of my classes has been taught by the aid of "Picturesque America," which contains pictures taken all over the continent. They have used this book in the school-room regularly, and it contains a great many pictures of every place and part of the country. There are very few of our institutions that do not have in their library, or that the Principal, or that some of the teachers do not own beautiful pictures that are very easily shown to the class. If they would use these—and there can be no better use for them, however valuable the book—it would enable them to teach geography very easily, and rapidly. It does not require a stereopticon, or darkened room, or anything else that would be impossible for some of us to obtain. We have used this means of teaching geography, and we have also used a large model of soft clay; making a model of a map, putting in pegs to locate cities and towns. We have found the clay better than sand, for a model. We put pieces of looking glass in the clay, to give the levels of the rivers, to show how the water could run down, as it would run, when poured into Lake Erie, down over the Falls of Niagara, into the Niagara River, and into Lake Ontario, and so on out; and to show how the water runs down the Hudson River, seeming to flow in an opposite direction.

We have also used a map upon the floor, but the children could not be made to understand location or direction from any of our other appliances or pictures until we had a large map painted upon the floor in the school-room, with wooden blocks, with the names of the different buildings in the city, which they were obliged to locate. All these appliances, I suppose, are used in other schools, and they are simple, and easy to use. But pictures are not resorted to, or used as much in the schools as we think they should be. We would urge those who have valuable books, containing pictures, to give them to this use.

MR. D. C. DUDLEY: I think, if we had the means at our disposal, we ought to have such maps as they have for the blind; maps, and globes in relief.

I would not begin teaching a class geography, until they were able to converse with me very freely in the sign language. We would then have before us the globe in relief, showing the different countries, giving a conception of the world as a whole. I would not begin with the school house and school yard, but rather with the world as a whole. I would talk with them about the distance around the world; how long it would take us upon the cars, traveling twenty-five miles an hour, to ride around the world, and all about it, in that way. Then, I would take out a little section of this great world, and show them that it was so much upon the globe, but we would spread it out and make it larger, for convenience. And we would have a map of the United States in that way. And I would let the pupils travel about from one State to another, all over the country.

MR. JAMES SIMPSON, of Dakota: I have no magic lantern, and am doubtful if I have pictures; I teach with a map of the United States

on the wall, and use it every few days. I get newspapers, and explain to them about the riots in Chicago, and ask them if they know where Chicago is, and to find it on the map; and I tell them it is the largest city in Illinois, and all about it. The next day the newspapers bring news of the railroad strike, and I ask them to find the railroad on the map. In this way the pupils remember for a long time what they are taught. I also take thirty-nine girls to represent the United States, each girl representing a State, and have them look for the name; and I will explain to them that Dakota was not a State, which would reduce it to thirty-eight. If you give them something interesting, it will fasten itself in their minds, and they will remember it. Give them items of news from the newspapers every day, and it will be very interesting and help them in gaining a knowledge of geography, and also language and spelling. I would make use of current events in the teaching of geography. When the children read that something has happened in some part of the country, I would immediately inquire, "Where is that place? Find it on the map, and tell me all you know about that town."

MR. JENKINS: I will explain briefly why I begin as I do, and as Professor Elmendorf does, and not as Mr. Dudley would, in teaching geography. And I can show the correctness of my idea by reference to the parallel study of astronomy. While all boys who attend our schools know something about the Copernican theory of astronomy, I think they know less about the actual facts before their eyes than persons did many hundred years ago. You take the Book of Job, and you read of the sweet influences of the Pleiades. You take Chaucer, who wrote for common people, and you will find that he assumes that the plowman and the miller knew about the constellations, knew about the rising and setting of the stars, and knew of the backward motion of the sun and stars. I do not believe that the same class of people know anything about that to-day; I do not believe that one person out of fifty who knows that the earth moves round the sun, knows that the sun moves backwards among the stars. And the reason is that the people have ceased looking at what the stars tell them and take what the book tells them. As a matter of fact, I believe it is easier to take a boy whose mind is rooted and grounded in what his eyes tell him about the heavens, and make him understand the Copernican theory of the solar system, than to take a boy who knows all about that theory but has not used his eyes and to make him understand it perfectly. So, I think it is easier to take a boy who knows how to go from the State School for the Deaf Mutes, in Trenton, New Jersey, down to the State House, and knows how far it is in miles, and just about how tired he would be if he walked it, and all that sort of thing, and teach him the shape and size of the earth, than it would to take a boy who has grasped the earth as a unit; who has looked at the globe and map and then got it thoroughly into his head that from this little spot on the map to the other is ninety miles, and how long it would take an express train to go, and that it would cost him one dollar and seventy-five cents.

REV. GALLAUDET: I have been so long out of the class-room that perhaps I can hardly add anything of interest or profit to this discussion. But if I recollect right, I found geography—that is, the names of cities, rivers, and places—a sort of alternative to the excessive practice of language. Such little exercises as these were of interest to the class, and would stimulate them in their studies. After they had

gone through this preliminary work, to give the deaf mutes a general idea of geography, it seems to me acts as a stimulant to them. They want something like an intellectual gymnasium. Let the pupil write all the names of cities, rivers, mountains, and so forth, that he can think of that begin with "A," and tell in what countries they are. He will not at first have a distinct and clear idea of them, but he will know that they are spots on the earth called by those names. And that very exercise would assist him in the study of words, and tend to make him interested in all parts of the earth; and by using his memory in that way you quicken his intellect. And as teachers often wish to have pupils employed at something while they are correcting compositions or something else, tell them to get their slates, and let them engage in exercises of this kind to show how much is stored in their memory.

I think that geography interests pupils very much. I have found them interested in learning the names of cities, mountains, and rivers all over the earth, and it has astonished me to see how much they remembered correctly. I would have them write a whole list of places beginning with "A," and have them tell me where they were; and then I would take up all places beginning with "B." This plan used to help me very much in keeping the pupils busy; and they were all interested in it, and it was useful as an intellectual gymnasium.

Here the section adjourned until Monday morning.

THIRD DAY.

The convention met Sunday afternoon at three o'clock in general session, President Gillett in the chair. The attendance, which was small when the assembly bell rang, gradually increased until five o'clock, when a majority of the members of the convention were present, earnest listeners to a discussion of the moral and religious phases of this work. The subject as ordained by the Business Committee was "Sabbath Exercises in an Institution for the Deaf and Dumb."

PRESIDENT GILLETT said that it was the practice in the Illinois institution to deliver a lecture or sermon every Sabbath morning, and in the afternoon a meeting of teachers and pupils was held. At this meeting he generally read the verses of a psalm alternately with one of his teachers, the pupils following, and repeating in the sign language the verse as repeated by the teacher. They then recited the Ten Commandments, the Apostles' Creed, and the Gloria Patria. The lesson was then read and the pupils repeated a hymn, generally with a chorus. It was very beautiful to see these pupils reciting in concert in the sign language, and the exercise never failed to produce the most excellent results. President Gillett then assumed that the convention was a Sunday school for deaf mutes, and that he was the superintendent, the members of the convention being the pupils. Mr. Walker acted as interpreter. He announced the hymn beginning "The Lord is in His temple, let all the world keep silence before Him." The exercise was carried out as President Gillett suggested, and was indeed impressive, the members standing and repeating in

the silent eloquence of the sign language the ideas of the hymn, as interpreted by Mr. Walker, the only sound audible in the hall being the rustling of clothing as the arms and hands of the assemblage gave expression to the beautiful thoughts. Mr. Gillett then read a passage from the Scriptures, selecting Luke IV, beginning at the fourteenth verse, descriptive of Christ's entry into the synagogue at Nazareth. He also read the passage descriptive of the Savior's departure from Galilee and the miraculous cure of the man who was deaf and dumb. Mr. Weed then led in prayer, closing with the Lord's Prayer, which was repeated in concert. Mr. Gillett then called five young ladies and two young men, all of them deaf mutes, upon the platform, and gave them the hymn "Jesus, Lover of My Soul," with the chorus:

"I do believe,
I will believe,
Jesus set me free."

The verses of the hymn were recited in the graceful movement of the sign language by the mutes, each repeating a verse, at the close of which they gave the chorus in concert. Mr. Gillett explained that exercises of this kind interested the pupils more than his lectures could, and being appropriate for the occasion prepared them for what he had to say later.

J. A. McCURE, of Nebraska, then read a paper on

MORAL PHASE OF OUR WORK.

The work of educating the deaf has assumed vast proportions in this country, from its small beginning at Hartford, about three quarters of a century ago.

The rapid progress of this work, and the zeal and devotion manifested by so many who have devoted their lives and best energies to the elevation of this unfortunate class of our citizens, speak volumes for our Christian institutions and the philanthropy of our people.

Ours is truly a missionary work of no small importance, and may we not safely say, that it stands at the head of the list, in this respect, for reasons that we shall mention.

The importance and imperative necessity of the *moral instruction* of the deaf, may be better understood, when we consider the utter darkness which envelops the mind of every uneducated deaf mute, who has had no opportunity of gaining knowledge before becoming deaf.

I think that every congenital deaf person in this audience will testify to the fact, that the uneducated congenital deaf mute can have no correct knowledge of God or their relation to him; no conception of the plan of salvation through Jesus Christ; no idea of a future state.

Was it not such reflections as these that prompted our noble Gallaudet to abandon his plans and prospects for a useful life in the ministry, and devote his rare talents and energies to the lifting up and enlightening of these neglected ones.

Such an inspiration could not have been other than from above; and the zeal and consecration with which he entered into and pursued the work to a successful issue, has won for him the admiration of the world; the most profound respect to his memory, of every lover of humanity; and may I not say, a crown that shall be adorned with many jewels.

I have felt that the *moral phase* of our work has not been given sufficient prominence in our conventions, or in our institution papers.

A grand work has been done, and is being done, in all our institutions, in this direction; but it seems to me the time has come when greater effort should be put forth for the *moral development* of these unfortunate children, intrusted to our care and instruction. We should strive by example, by precept, and by every means in our power, to lead them to the Rock that is higher than we, not ceasing in our efforts until they are led into the light, and give evidence of true and thorough conversion. Who is more capable of doing this work than the earnest Christian teacher? For such, I trust, is every one engaged in this important work. By improving the various opportunities that present themselves, the mind of the child may be gradually impressed, and led step by step in the way of life.

This I believe to be the duty of every one who assumes the responsible position of an instructor of these unfortunate children.

Every one who has any experience in this work knows how entirely dependent are these children upon their teachers for all the knowledge they receive, and with what implicit confidence they look to the teacher for new light upon any subject that may be presented.

Especially is this true in regard to spiritual things. When once the mind begins to unfold to a realization of the fact that it is possessed of a spiritual life, that "it is not all of life to live, nor all of death to die," with what earnest desire does the pupil then look to the teacher for truth and light. If this desire be satisfied by the teacher to the best of his or her ability, when first awakened in the mind, then may the child be easily led in the way of life, almost unconsciously to itself. But if the true light which it so much desires be withheld, and something else substituted in its place, there is danger that the impressions made upon the mind may result in diversion from the truth, and perchance moral wreck. Who is responsible for such a result? Can any teacher prove false to such a trust? I tell you it is no trifling matter to assume such responsibilities, and we cannot throw them off. "He that winneth souls is wise; and he that turneth many to righteousness, shall shine as the stars, forever and ever."

The condition of a deaf mute child is vastly different from that of a speaking child. The latter has opportunities of hearing the conversation of those around it, and of being instructed in Sabbath school, or by religious parents; but the former is entirely shut out from any knowledge of these things until made known to it by the teacher. When we consider the fact that the earliest impressions of the mind are the most lasting, and have the greatest influence upon the life, how important that we, as teachers, be faithful to our trust, and see to it that good seed shall be sown in this *fertile soil*, prepared by the divine hand for its reception. The value to these children of the cultivation of their *physical* and *mental* powers cannot be estimated; but, after all, they should only be considered as stepping-stones, or helps, for their higher development into a *spiritual life*.

The regular chapel services that are observed in most of our institutions are very good in their place, but are not sufficient for the accomplishment of this important work.

Prayer meetings should be organized for the pupils, and encouraged by the presence of as many teachers as can conveniently be present; in which all the larger pupils should be encouraged to take

a part, and to feel that it is their meeting, and that it is profitable thus to wait upon the Lord, and renew their spiritual strength, at regular stated times.

As the body requires food regularly for the preservation of natural life, so must the soul be fed daily from above, with new supplies of grace, that it may live and grow into perfect spiritual manhood.

The teachers should make it a point to drop in to these meetings as often as convenient, and sometimes when not entirely convenient, and encourage the work by their presence and counsel. Hold up Christ before them as the *Chiefest* among ten thousand, and the *One* altogether lovely. The only *name* given under heaven and among men, whereby we must be saved. By such special efforts and services the pupil is brought into more intimate relation with God, and is made to feel that it is a solemn thing to approach into His presence.

We have been holding such special meetings in our institution at Omaha for the last two years, and great good has resulted to the pupils; not only in the moral growth and development of many, but in general good order in their daily lives. "Godliness is profitable unto all things; having the promise of the life that now is, and of that which is to come."

I believe this to be the grand secret of true success in any institution. "Get the heart right, and the life will be right;" but while the heart and mind remain under the influence of sin, how can we expect good order, or the best results in any direction?

I think also that special effort should be made, by conversation with the pupils separately on this subject, as his or her case may require. In this way we may gain their confidence, and be able to give them such necessary advice or encouragement as cannot be done in the promiscuous gathering. They feel that we are interested in them individually, and are much more likely to heed the admonition given.

Such work may, and should, be accomplished without introducing any sectarian dogmas or isms. Give them the pure milk of the Word; and, like Paul, "know nothing among them save Jesus Christ, and Him crucified."

God speed the day when our institutions shall vie with each other in holding up the banner of the Cross, by a holy zeal on the part of every teacher and officer for the spiritual well-being of all their pupils, and in recording them as Christian boys and girls, when going out from the institutions to engage in the more permanent and active pursuits of life; then shall they be prepared for good citizens, and shall be factors in the great work of evangelizing the world.

MR. NOYES read a paper on "The Importance of Religious Training for the Deaf and Dumb." He considered the moral and religious element of the utmost importance in institutions of this character, and did not think any man fit to be Superintendent of such an institution unless he was a godly man and professed his belief before the whole world. If it was necessary that any family should be imbued with religious ideas, it was that gathered within the walls of a deaf and dumb institution. He then detailed the Sunday school methods of the Minnesota institution, stating that about one third of the pupils there were of Roman Catholic parentage, and that the exercises were broad and undenominational enough to include every sect without offending the prejudices of any of them. A monthly review

and examination in the work were features of the Sunday school in this institution.

PROFESSOR HOTCHKISS, a deaf mute, described the Sunday school work at the Washington College, where the Sunday school has an entirely separate existence from the college itself. A feature of the work in this institution was the contribution of money by the pupils for charitable purposes. On one occasion they contributed \$80 per annum for the education of a pupil, a native girl, in Smyrna. Local charities are also assisted. Last year they sent money to Alaska for the education of the Indians in that Territory, and a short time ago they donated a sum to assist the deaf and dumb institution recently organized in Santa Fé.

DR. GALLAUDET, of Washington, thought that all instruction should be undenominational, and they could not be too careful in the avoidance of anything that might tend to give an institution a denominational character. Religion should be plainly and constantly taught. A spiritual religion should be taught, a religion that inculcates the idea of a future life and that man possesses an immortal soul. The institution should be erected in the fear of God rather than as a peculiarly Christian establishment, for the Israelites are as God fearing as any Christian, and their tenets should be respected. It would not be right to proselyte among the pupils, and they should be allowed and encouraged to grow up to honor the faith of their parents. They should be taught that this is a free land and that it is wrong for one to say to another, "I am better than thou." He was earnestly opposed to having the public money used for denominational purposes in the education of the deaf and dumb, and he would go so far as to advocate that sectarian religious training be put without the walls of every institution in the country. In his own practice no line was drawn between the Roman Catholic and the Protestant, any more than there was between the Baptist, the Methodist, and the Presbyterian. He had carried out this idea in the Washington College, and at their last exhibition, Father Doonan, of the Georgetown University, and chief of the Society of Jesus in this country, had, at the conclusion, delivered an extemporaneous prayer and pronounced his benediction and blessing upon the institution.

MR. WEED delivered a discourse on "Missionary Work in Deaf Mute Institutions," in which he claimed that as the instructors of the deaf and dumb stood in the same relation towards their pupils as parents, they should train them as parents would in teaching them their religious duties.

MISS CAMP, of Ohio, gave her experience of what may be accomplished in Sunday school work among the deaf and dumb.

RELIGIOUS SOCIETIES AMONG THE DEAF.

Some years ago, Miss Sarah Perry, a young lady teacher in the Ohio institution, commenced holding weekly religious meetings among the girls. It was her custom to instruct them concerning their spiritual needs and daily duties. These gatherings were, I am told, invariably well attended and bore good and lasting fruit. It was my good fortune to meet and to know her during the first few months of my work as a teacher previous to her death, which took place in the year 1879.

Three years later, on having become sufficiently familiar with the

sign language, it was my privilege to take up and carry on the same general plan. At first only four or five young ladies attended the meetings, but soon the interest grew, and before the month was out some forty had enrolled their names as members of a society aiming at better Christian living and feeling among themselves and toward officers and teachers. A set of resolutions was drawn up and signed, and the society, at a subsequent meeting, was christened "The Sarah Perry Society," in honor of its deceased founder. At the close of the first year some fourteen or fifteen had joined their respective churches. The membership increased to about one hundred the second year, and has since maintained that number. Some forty in all have become church members during a three-year experiment.

I have, of course, as leader, met with many discouraging circumstances, and with difficulties more or less trying and serious, and which more experience on my own part may have averted. There were the usual number of lukewarm and disaffected members also, common to organizations of all kinds; but the steady improvement of some and the earnest leadership of others convinces me that much good may be accomplished by some such means.

In the days of the elder Dr. Gallaudet the religious education of the deaf was looked on as a sacred duty. Perhaps in our efforts to train them mentally we overlook some of their spiritual needs. True it is, Christ alone can change the hearts of men, but there is much we can do toward leading His children to His feet. I have found by experience, that *personal interest in the individual pupil* is the surest way of gaining his or her attention on religious subjects. Given a society of some such kind as described above, no matter how small or feeble, the mere being united and brought into personal contact with each other and the leader, has in it a power to make and hold interest beyond words, to say nothing of its being a valuable auxiliary to regular church work.

MR. HASENSTAUB, of Illinois, a deaf mute, detailed methods by which the Sunday school work may be made very interesting and instructive to deaf mutes.

WARRING WILKINSON, of the California institution, said that the Sunday school in that institution was purely an affair of the pupils. The classes were all conducted and instructed by the pupils, and the credit and honor of its organization was wholly due to Mr. d'Estrella, a pupil, who had been its Superintendent for twelve years. The value of this method was apparent in the fact that it brought the pupils into active work and inspired them with a certain responsibility. He had attempted to exercise no control over them in any particular, and he was certain that lasting beneficial results had been attained.

PROFESSOR CROUTER, of Philadelphia, stated that the work in that institution was very similar, and the results were very satisfactory, because the pupils take an individual interest in the work. In the Philadelphia institution the Catholic children attend mass and the Catholic Sunday school, returning to the lecture and sermon at the institution.

MR. MOSES, of Tennessee, described the methods in that institution, which are similar to those of the California institution, the Superintendent being a deaf mute, and the more advanced pupils acting as teachers. He had found that under these conditions the lessons were more thoroughly learned than in any ordinary methods.

ERASTUS BROOKS, of New York, stated that in that State a general appropriation of money was made for the support of six deaf and dumb institutions, one of which was filled with Catholic children and another by those of Jewish parentage. In answer to questions by members of the convention, Mr. Brooks stated that these latter schools were supported out of State money.

DR. GALLAUDET said that it was his conviction that when a State allowed money for the support of a denominational institution, even though that institution may have become so after its establishment as a public institution, they acted inconsistently with the spirit of our Government. He would object to the division of public moneys for the support of Baptist, Methodist, or Presbyterian institutions as much as he did to the appropriation of money for the Roman Catholic or Israelite. He felt the same in this matter as he did regarding the money appropriated for the public schools, and he was not aware that any State had ever appropriated money for the support of denominational public schools. He did not blame the Buffalo and Fordham institution managements for getting all they could out of the State, but the fact that they were permitted to exist as separate denominational institutions, supported at the public expense, was certainly contrary to the spirit of American institutions.

PROFESSOR NOYES, of Minnesota, thought that a parent could send his child where he pleased, and the State had no right to dictate in the matter to compel him to place his child in any institution where the preponderance of religious instruction favors any one denomination. All the State required, and all that they could take cognizance of, was the education of the child. The pupil should receive good moral instruction, and permitted to have nothing to do with sectarian religion as far as the institution was concerned.

The convention then adjourned until to-day, at nine o'clock.

MONDAY, JULY 19, 1886.

MORNING SESSION—NORMAL SECTION.

The Chairman, Mr. Ely, called the meeting to order; and the Rev. Job Turner offered up a prayer.

MR. WEED: The first exercise this morning will be conducted by Miss Harris of the Maryland institution, the exact nature of which she will at once explain.

MISS R. R. HARRIS: The language exercises of which you see an illustration on the slate, are not designed as foundation work for the structure of language or for lessons in grammar. The pupils with whom I use this method have a fair use of English and the difficulties of tense have been surmounted to a considerable degree. When called upon to write a letter or story given them in signs, their work is quite satisfactory. And yet, in these letters and stories I frequently find an ignorance of some term or phrase in daily, almost hourly use, connected as it is with the life of the household, the duties of the school-room or workshop, or the pastimes of the playground. Other teachers of intermediate classes have no doubt had the same experience. This ignorance is the fault of neither teachers nor pupils, who

through a period of four or five years have been occupied with primary lessons in language.

Text-books and original lessons have supplied the pupils with a large stock of words and phrases which they use with a fair degree of fluency. They have acquired much that is valuable during the time they have been under instruction. We all know, however, that to these pupils, and even to those of a higher grade, the vernacular, as one may say, of every day life is almost a sealed book. Here and there are expressions with which they are familiar, but in the majority of instances this vernacular is for them an unknown tongue. For instance, when told "Make up your bed," the pupil understands what she is to do, but when requested to "tuck in the bed clothes," or to "turn them down," she looks at you inquiringly and asks "What do you mean?" She knows that her mother mixes flour, yeast, and milk to make bread, but she does not know that this mixture is called "the sponge" or that her mother "sets it to raise." A boy goes on a fishing excursion, and in writing an account of the adventures of the day, he says that he put a worm on his hook and a fish bit the worm a little, but he did not catch it. This statement is sufficiently clear, to be sure; we know what he means; but would it not be better did he use the terms common to this sport, and say "I baited my hook," "the fish nibbled the bait?" "The doctor held my wrist" writes a pupil when he wishes to say "The doctor felt my pulse." Instances could be multiplied where expressions used only in connection with particular subjects are greatly needed by the pupils of all our intermediate classes. To meet the wants of my own class I have prepared a series of lesson papers resembling in form the following exercises:

CHURCH.

Nouns.

Cathedral. Meeting-house. Church. Church-bells. Steeple. Vestibule. Gallery. Middle-aisle. Side-aisle. Chancel. Font. Pulpit. Lectern. Bible. Chapter. Verse. Text. Hymn-book. Hymn. Doxology. Prayer-book. Prayer. Organ. Organist. Choir. Collection-plate; basket. Communion. Communion-service. Priest. Minister. Sermon. Sexton. Congregation-Elder. Steward. Deacon. Denomination. Episcopal. Methodist. Presbyterian. Baptist. Lutheran. German-Reformed. United-Brethren. Quaker. Roman-Catholic.

Adjectives, Adverbs, etc.

Congregation—Large; small; attentive.
 Services—Solemn; impressive, etc.
 Sermon—Eloquent; fine; interesting; instructive.
 Music—Fine; sweet; good.

Phrases.

- | | |
|---------------------------------|------------------------------|
| Services are held at —. | — preach. |
| The church bells ring. | — listen to —. |
| — attend church. | — take up a collection. |
| — conduct — to a seat. | — put — into the collection. |
| — walk up; down the aisle. | — receive into the church. |
| — kneel. | — confirm —. |
| — offer prayer. | — unite with the church. |
| — bow —' head. | — belong to the church. |
| — announce the text, hymn, etc. | — is a member of the church. |
| — make the announcements. | — administer the communion. |
| — sing —. | — commune. |
| — unite in singing. | — baptize —. |
| — play on the organ. | — sing the doxology. |
| — offer — to —. | — pronounce the benediction. |
| — accept —. | — dismiss —. |

SICKNESS.

Nouns.

Appetite. Diet. Headache. Chill. Fever. A sore throat. Pain. Stupor. Delirium. Attack. Disease. Eruption. Blister. Tongue. Pulse. Stomach. Doctor. Patient. Nurse. Medicine. Dose. Drops. Pill. Powder. Prescription. Label. Drug Store. Druggist. A teaspoonful; tablespoonful of —. Sick room. Hospital. Message. Telephone message. Telegram.

Adjectives, Adverbs, etc.

Person—Thin; pale; weak; sick; ill; worse; delirious; conscious; unconscious.
 Throat—Inflamed; ulcerated; swollen.
 Tongue—Coated.
 Face—Flushed.
 Lips—Parched.
 Pulse—Quick; slow.
 Disease—Contagious; infectious; dangerous.
 Every hour; every two hours. Once a day; three times a day.
 Before meals. After meals.

Phrases.

What is the matter?	A fever increases; passes off.
How do you feel?	— suffer.
— lose — appetite.	— fall into a stupor.
— have a poor appetite.	— is at the point of death.
— fall off.	— open —' mouth.
— look pale; thin.	— put out — tongue.
— complain of —.	— examine —.
— feel weak; sick.	— feel —' pulse.
— get sick.	— prescribe for —.
— get well.	— write a prescription for —.
— become (grow) ill.	— give directions about —.
— become (grow) worse.	— follow —' directions.
— feel sick at the stomach.	— give a dose of medicine to.
— vomit —.	— put a blister on —.
— break out with; is broken out with	— dress a blister.
measles, etc.	— gargle the throat.
The head aches.	— mop; paint; spray the throat.
— have a headache.	— take a disease from —.
— have an attack of —.	— sit up with —.
— have a sore throat.	— air the room.
— have a pain in —.	— send for —.
— have a chill.	— telephone for —.
— have a fever.	— telegraph for —.

These lesson papers deal with subjects which form the general topics of conversation in ordinary, everyday life. The forms of expression given are not always the most elegant, but they are in constant use, and are therefore essential to the pupil. My aim has been to supply my pupils, not with all the expressions common to a given subject, but with those most important. So far as possible, I have limited the vocabulary and the idioms, wishing to avoid any confusion of ideas that might arise from a more extended lesson. The success of these exercises with my class has been most gratifying. They have showed the greatest interest in the subjects as they have been presented, and their compositions written upon this method have been most creditable.

When introducing a new subject, I place it upon the slate in the form as here presented. A careful explanation of the vocabulary, and of the phrases then follows, with frequent illustrations, given either upon another slate, or by means of the manual alphabet. When sure that the lesson is fully understood, the pupils are required to write a composition upon the subject. Of course, I do not require them to use all the nouns and phrases, but simply those that will convey the ideas they wish to express. Printed slips of these subject lessons are given to each pupil, and by means of mucilage, they are

preserved in book form. At frequent intervals, they are called upon to write an exercise upon some paper in the collection. This exercise serves as a review lesson. Towards the close of the year, they are required to hand in a composition upon one of these subjects, written without the aid of the papers.

The following composition, prepared by one of my pupils, illustrates the use of these lesson papers:

SICKNESS.

Last year, Carrie McKenzie lost her appetite, and nothing tasted good. She felt weak. Miss Shugh saw that she looked pale and sick. She said to Carrie, while she was sitting on a chair in the sewing room: "What is the matter with you?" Then she said that she did not feel well. Then Miss Shugh told her to go up stairs, to get in the bed in the sick room. While she was going up stairs, suddenly she felt sick at the stomach and she vomited. Miss Shugh heard a noise on the stairs, and then she went and found Carrie had fallen on the stairs. Then she was very much frightened and carried her into the sick room. Miss Shugh thought that she had better send for a doctor. He came to the sick room and said to Carrie: "What is the matter with you?" She said that she had a bad headache, and she had a sore throat. The doctor told her to open her mouth. She did so, and then she put out her tongue. He examined it. He told Miss Shugh that her tongue was coated. He examined her throat, and said that her throat was inflamed. He did not tell Carrie about it, because she could not understand what he said. He felt her pulse. He said that she had a fever. He wrote a prescription for Carrie, and gave directions about the medicines. Miss Shugh said: "Yes, I will follow your directions, exactly." She gave a dose of medicine to Carrie three times a day. She mopped Carrie's throat. Miss Shugh told her that she would get well soon under the doctor's care. She suffered some with her throat, but she got better. She stayed in the sick room a few days.

The girls said: "Poor Carrie! Poor Carrie!" Carrie has been well since then. Miss Shugh told her that she must be careful not to get a cold. She is a bright little girl.

M. F. S.

PROF. F. W. BOOTH: How long had that pupil been in school?

MISS HARRIS: Five or six years. The pupils of my class have been in school from four to six years. I have used these lists during the past four years.

PROFESSOR BOOTH: Is this pupil deaf and dumb?

MISS HARRIS: She articulates; but she is a congenital mute. She belongs to the articulation class.

A MEMBER: I desire to ask if that composition is now as it was written by the pupil?

MISS HARRIS: With the exception of a few minor mistakes in the use of tense. It is almost exactly as she wrote it.

A MEMBER: Do you give all of the names on this list as one lesson?

MISS HARRIS: Occasionally I do. Sometimes I divide the lesson. I then require them to write on half of the lesson one day, and the next day take up the remaining half; the lesson of the third day would embrace the whole.

A MEMBER: To what pupils do you give that?

MISS HARRIS: To pupils who have been in school from four to six years.

A MEMBER: Will you explain just how you use these phrases?

MISS HARRIS: I spell out sentences embracing these phrases or write them on another slate.

A MEMBER: Before you give them the phrases contained in the list headed "Church," do they know what it means "to attend church?"

MISS HARRIS: Yes, many of them; but an explanation of every lesson is given before they are required to write upon it. I explain every phrase until I am sure they understand it.

A MEMBER: As that is arranged there, by carefully filling in all blank spaces, they could write a good composition.

MISS HARRIS: That is what I wish them to do; to use these expressions in connection with this particular subject. I fill in for them, and give many illustrations before I require them to write these compositions. I wish them to understand that by using these phrases and nouns, they can express themselves clearly upon the subject of attending church.

MR. A. S. CLARK: I would like to say that I think Miss Harris' mode of instruction an excellent idea; and that she has carried it out admirably. I think the arrangement is good; and I very much hope that all teachers of the deaf and dumb will at some time have the benefit of these. I hope they will be printed for our use; for I think we can all make use of them. I know that I shall be very glad of such help already prepared. It would save me an immense amount of work. I should be able to place them in the hands of my pupils just when I wanted to, and I am sure it would help them very much.

MR. ELY: It is the intention to put these in pamphlet form for distribution if there is any desire for them.

MR. WESTERVELT: These have all been printed from time to time.

MR. ELY: Yes, sir; we print lesson exercises of all kinds every day, whether they are important or for passing use. We print them for convenience.

MR. WESTERVELT: You have a paper published at your school. Would it not be a benefit to the profession, and to all of the institutions where papers are published, if such work as this done by Miss Harris were printed in such paper for the benefit of other institutions. If it is already set, all that is necessary is simply to keep the type standing until a paper is published; and it would be very valuable for other schools. We all look through the institution papers, and we are very glad to get hold of anything of this kind. I think there is altogether too little of it. We see here that Professor Ely has been doing for a long time in his school a great deal of most excellent work, which has been hidden there; and I hope that he will give it to us. We publish a paper at our institution, and I am glad to publish anything that we do; anything that is going on at our school; and if our institution papers did that more, it seems to me that they would be worth a great deal more to all institutions. I think that the pupils would receive great benefit from having this printed to carry around with them.

MR. MCFARLAND: I like that suggestion. I think that we all of us would be glad to subscribe for every paper in the country for the sake of the information we would get, if we were sure of finding in each of them some department devoted especially to methods of teaching, or some similar matter. And in the course of time there would be gathered an immense amount of practical information from the men who are doing the work of devising methods and of testing them all of the time, which would be of exceedingly great help to all; and a large number of teachers and pupils would subscribe for the papers.

A MEMBER: For how many classes do you have papers of this class printed in your school?

MR. ELY: For four or five older classes. They are printed and distributed to the pupils. These lessons do not take the place of textbooks at all, but are simply exercises in language.

THE CHAIRMAN: The hour having expired, the language section has the floor.

MR. WEED: The next topic for consideration is not a poetic one, but

is one which all of us recognize as eminently practical—"The Correction of Mistakes."

I will first speak of the correction of mistakes by avoiding them. If that seems to be an Hibernianism, I am reminded of the boy who said that pins had saved a great many lives. When asked how, he replied: "By not swallowing them."

I have three suggestions under the head of "Avoidance." One is, a limited vocabulary, which we considered the other day, and which I will not repeat.

The second is "Past Tense" in the first year and possibly the second year, which has been considered, and which I will not repeat. This implies the non-use of synonyms, which has already been considered.

And the third and last point is: "To conceal from the eye, as much as possible, incorrect forms." For years it was my practice to take mistakes that I had found in compositions and write them out on a large slate in the presence of the class. An experienced teacher finally said to me: "Do you not see how every time you do that you impress that mistake upon the mind of the pupil?" I saw the point at once, and from that day have not done it. We should be as careful to conceal from the eye of the pupil, so far as we can, the sight of a mistake, as we should to keep a child from hearing an incorrect expression.

Those are the negative answers. Now for the positive. There are four methods of correcting mistakes:

First—By a teacher, without any aid on the part of the pupil, in the correction of his own mistakes. We all know what that is: to sit down by the side of the pupil, take a slate, full of mistakes, and write the correct forms. And what does it amount to? In nine cases out of ten the mistake is not noticed or remembered by the pupil, and the next time he writes a composition, the same mistake is repeated. I wish I could recall the months, and might almost say the years, that I have spent in this kind of work, that has been of no avail.

Second—To require the pupil to discover and correct his own mistakes. If a child brings to me a slate, with a composition on it, I first ask him: "Have you read that over yourself?" If he answers "No, sir," I tell him to go back to his seat, and read it, find out what mistakes he can, and correct them, and then bring it to me.

As an illustration of the effect of this, we have, in our school-room, a morning journal, covering one of these slates. Let me take the exercises of one boy, for one morning, one of the poorest scholars in the class, who had on his slate, for his morning journal, one hundred and twenty-nine words. In looking it over, I found that he had three mistakes. I could not get him to discover them, and yet I was satisfied that if he knew what and where they were, he could correct them, and on my pointing to the three, he did correct them. It is not my custom to indicate at once the mistake. I ask him to read the line in which the mistake occurs, and to find where he has made the mistake, either in the tense of a verb, in the termination of a noun, in the use of a preposition, or anything else.

I have spoken of thirteen pupils whom I have kept together during six years; and what I am saying applies to those thirteen, and not to the two or three others in the class. At another point I will give a result showing the benefit of this method of correcting mistakes.

When the three methods I have spoken of fail, I use the fourth method—the teacher correcting mistakes. And wherein does the

fourth differ from the first? Much every way. In the second and third the pupil's knowledge has been tested, his judgment exercised, and the exact measure of his ignorance has been determined, and he is prepared to apprehend his own difficulty. The effort of self correction has stimulated him, and he has a nicer discrimination than he would have had without it; and the correction is more fully fixed, and so less likely to recur.

But, after all, the question is unanswered, how shall the teacher correct mistakes? One portion of the answer is: By unclassified model sentences in which the pupil's mistakes are corrected, which I will now illustrate. I do not correct the mistake directly. I will, for illustration, give three sentences which I have copied from slates, and then show the manner of correcting them.

It may be very ungracious in me to tell tales out of school, and to cast any reflection upon our Principal; but I am not responsible for this sentence. Dr. Gallaudet had entertained our pupils very much with a lecture on his travels in Europe. Mr. Crouter had explained by signs what Dr. Gallaudet had said. The next morning one of the boys wrote: "Mr. Crouter *interfered* while Dr. Gallaudet was speaking." The mistake there is, of course, the word "*interfered*." I do not correct that sentence, but I do make a minute of the word "*interfered*" in my private memorandum book; and as he intended to write "*interpreted*" I also make an entry of that.

Example No. 2 was as follows: One of the boys wrote "Elizabeth was able to send to sea twenty thousand fighting men on a board." What he should have said was "on board of."

The boy who has made these mistakes has not been one of the thirteen who have had the advantage of a uniform course during the last six years. In fact, he has been in school three years longer than those thirteen, and has more words and phrases than any other boy in the class.

Another boy who has been unfortunate has given us this; and if Mr. Crouter is at all offended by the statement that he *interfered* while Dr. Gallaudet was speaking, he may derive what satisfaction he can from the positive assurance that "Mr. Crouter ennobles by principality in this institution."

Another example: "When Cleveland became President of the United States, he sent missionaries to foreign countries. The Rev. Mr. Pendleton, who President Cleveland appointed missionary, was sent to Germany." I write down the word "missionary" on my private list without the knowledge of the pupil. I also write in my private list the word "minister." Now, I have here the words of which I have made a minute: "*interfered*," "*interpreted*," "*board of*," "*missionary*," and "*minister*." At some time, perhaps the next day, when I have leisure, I compose sentences in which I shall use these words correctly. I will read a few sentences in which I have used these words correctly. I want to correct the word "*interfered*," and have the distinction made between "*interfered*" and "*interpreted*," so I compose the sentences: "Zeigler, the Prefect, *interfered* when two boys were fighting." "Mr. Crouter *interpreted* when Dr. Gallaudet was speaking." "When Dr. W. started for Europe, his father bid him good-by *on board of* the ship." "Queen Elizabeth sent twenty thousand soldiers to sea *on board of* vessels of war."

"Paul called himself a *minister* of Jesus Christ. He was a *mission-*

ary, and preached the Gospel in the synagogues of Thessalonica and B——."

"Hon. George H. Pendleton was appointed *Minister* of the United States Government to Germany, where Bayard Taylor died when he was a United States *Minister* there."

I copied these on my large slate in the presence of the class, and they read it over. I do not require them to commit to memory, but, as a matter of fact, they do. And, when they have become familiar with these forms, I have each boy copy the exercises in a blank book, which is kept for the purpose. Next week, some time, when they are not anticipating it at all, I give those sentences by signs, and they write them out from my signs. I then say, "Turn to page fifty, and compare what you have just written with what you copied into your book last week." And if there is any difference between their book and their slate, they indicate it, and show it to me. It is possible that they have written the sentence correctly, and, if so, I tell them. If they have made a mistake I then tell them to write it as it is in their book. A month hence I repeat this same exercise of giving those, sentence by sentence, and have them write them on their slates, and compare them again, at a time when they are not expecting it.

Now, as to the results of this process. They are two: one is, almost entire freedom from these mistakes. I do not say entire freedom. But, taking a class of thirteen, and supposing that these sentences number twenty, we would have two hundred and sixty sentences; and supposing those sentences have an average of twenty words each, we then have fifty-two hundred words; and I think I may safely say that, at the end of six months after that exercise was given, of the fifty-two hundred words there would not be an average of three mistakes to the pupil.

Second result: The eye is trained to discover mistakes. Let me give one or two illustrations of this point. A boy coming directly from the table one morning, wrote the following on his slate, and brought it to me, in relation to a text he had heard that morning: "'He was despised and rejected of me,' etc.; we know that the prophet, Isaiah, lived many years before Christ was born. Jesus is meant by 'He' in the text. Then, how could Isaiah write the word 'was' in the text, when Jesus was not yet born? I think it should be 'will be,' instead of 'was.'"

At another time, a boy, studying a Sabbath school lesson, says, "James, the son of Alpheus, should be 'a son,' because James had a brother, John; he was not the only son." Within five minutes another boy, not knowing what the first boy had done, brought me the same criticism.

And here is another that I little thought I should have occasion to read at this point upon this coast, when last winter it was under consideration. I showed a boy this sentence, and I wrote it just as it was printed: "Kernville, California, is a town of forty houses and but one inhabitant, who saw the mining camp at its rise, its glory, and its fall. His only neighbors are those over the hill, in the cemetery." Without any hint from me, the boy wrote the comma after the word "houses," and omitted it after the word "inhabitant," of course altering the entire sentence, and making it read: "Kernville, California, is a town of forty houses, and but one inhabitant who saw the mining camp at its rise, its glory, and its fall," etc. He was not quite so for-

fortunate in another instance, and as his teacher I am not responsible for the sentiment as he punctuated it. It was this: "Woman without her man, is a savage." I told him to read it over, and he, in a moment, put the comma after the word "woman," and after the word "her."

There is another class of exercises that we shall not have time to consider in full, but which is of very great interest and profit to pupils who have been under instruction for three or four years. It requires them to think. I will simply read one of the exercises and some of their remarks about it.

Without any notice, I will put a sentence of this kind on the slate: "One dark night, when the new full moon was shining, but no stars could be seen, a deaf and dumb boy, with an unloaded gun, walking alone in the woods, heard a bird singing, which he shot, and gave it to his companion."

They do not know, when they commence to read it, but what it is all right. They soon discover, and then it is the business of each boy to write out any inconsistency he can find, and they are required to remember them. They say: "This sentence is not correct, because, first, if the new moon was shining, it was not a full moon; second, the night cannot be dark while the moon was shining; third, the stars always shine when the moon is shining; fourth, he could not hear the bird singing, because he was deaf; fifth, the boy could not shoot the bird when his gun was unloaded." One boy writes, "If he shot the bird, he could not give it to anybody, because he was alone in the woods." Another boy says, "He was not alone in the woods, but he was with his companion, to whom he gave the bird."

There are other exercises of this kind that I have found it an interesting exercise for them, to make them think. For instance: "Wismer carried an empty barrel full of apples, with one hand on his head, and the other in his pocket." They will give six or eight reasons why that could not be.

Another example: "H. and K. wrote on the same slate. H. wrote on slate No. 21, and K. on No. 22. They began to write at the same time. H. began at nine o'clock, and K. at ten o'clock. They each wrote one hour and finished at the same time."

"A blind man could not see, because he lost his spectacles. He looked for them, but could not find them. Then he put them on his nose and read three pages of a book, without turning a leaf."

But the time for the discussion of questions pertaining to the primary and intermediate department is exhausted, and I must yield to other departments of equal importance. [Applause.]

THE CHAIRMAN: The hour for the Natural Science Section having arrived, Mr. F. D. Clark, of Arkansas, will conduct the exercises.

MR. CLARK: I had taken up the subject of botany, but since I have been upon this examination I have had put into my hands a paper by Miss Cornelia M. Ely, prepared while she was a teacher at Rochester, I think. I was asked to condense that paper, but it is so very good that I am very unwilling to leave any of it out that I have time to read. It treats of the natural history of all those sciences that we usually call the "ologies," in common speech.

It is as follows:

CLASSES IN NATURAL HISTORY, IN A SCHOOL FOR THE DEAF.

"What's it good for?" said one boy, somewhat disdainfully, when told that the class would begin the study of natural history. "Shall we study natural history next fall?" said the same boy, eagerly, at the end of that term. "I hope so. I like it better than any other study." This boy was one who, before taking up the study, had been less observant, less fond of thinking and of asking *why*, than most of the others. He became one of the most indefatigable searchers after specimens, and after information concerning them. The *whys* with which he continually came to the teacher were often well nigh staggering.

The acquisition of English is of the first importance to our pupils; and whatever the subject studied, this thought must always be kept in view. And in the language exercises which we give, we must place the information gained second to the acquisition of idiomatic English. We do not forget this first aim when we take up the study of natural history. We only say that these lessons open the most lively way that we know of accomplishing what we seek. Before learning to use language, there must be a *desire* to use it. The child must have thoughts to express, must be eager to express them. What are the best ways to awaken the child mind? "If they would only think!" What shall we do to make them ask questions? But to learn to ask questions, they must first *observe* something which interests them; and this will be that which they can see, or can *see* and *feel*, or in some other way *know* a little about. We must proceed from the known to the unknown, always. Here we find the first value of the study of natural history for our pupils. It is an excellent training and developing study, beginning with young children, and lays a solid foundation for knowledge by teaching to observe closely. It is object teaching, and the objects are all about us, and of endless variety. "Nothing is more natural than natural history," and even the little child, with wide open eyes, will make wonderful discoveries. Yes, *with wide open eyes*, for though so many of the wonders are always near us, we may go through all our days and know not that they are wonders, unless we are awakened to look closely and *see*. This study stimulates that curiosity which all children have in some degree, gives it food and satisfaction, and leads it in the right way. That child of three years, who seized the cat, pinched it all over (not maliciously, but curiously), and briefly said "*Bones!*" in a tone of discovery, was learning to observe, and had made a discovery in natural history. The little pupil who, having had a lesson that morning about honey, came running from her play, pulling open the flower she was bringing meanwhile, and eagerly asking, "Where is the honey?" was learning to ask questions and beginning to find lessons in the great book of nature. The study of natural history inspires and satisfies a desire for independent work. The child's mind is awakened to look and to wonder, then to question and to investigate. He is fascinated; for the more he learns, the more he finds to learn and the better able he is to learn; and the pleasure of finding out for himself gives zest to his work, while he forgets to even *call* it work. Being led a little way, he goes still further by himself, finding new wonders without help; and no one doubts that what we labor for we better appreciate than that which comes to us without effort of our

own. That this study is desirable and important for our pupils, has been proven satisfactorily to me. In all the variety of ways which we have for teaching language, always striving to make the study interesting and our pupils enthusiastic in learning, there are certain difficulties with which we often have to contend, viz.: To induce the pupil, not merely to memorize, but to *think*; not simply to take unquestioningly all that is given him, but to *seek* for himself; not always to be ready to acquiesce in *our* opinion, but sometimes to *tell* his own. Nowhere can we find more interesting nor as "*live*" topics of conversation and various language exercises as in this study. The ways employed in teaching it are of great value in teaching language. If the pupil *thinks*, he will not only *take*, but will be interested to find out for himself, and *finding* out, he will have opinions to tell. He will *want* to talk, for he has continually something new and interesting, and he will never try harder to express his thoughts, nor be more glad to be helped to a correct expression of them, than during these lessons. He will be enthusiastic, and enthusiasm is a great help. No books are needed, and this is a point in favor of our pupils, who, in these conversational lessons, or familiar talks and object teaching, gain the use of idiomatic English which their text-books do not furnish, while often puzzling them greatly. But after this, the study inspires a desire to read for the express purpose of gaining information such as few studies awaken. The teacher studies with the pupils, using, and teaching them to use, books of reference, and must never be afraid to say, "I don't know; I will look it up." For to teach in this way demands study on the part of the teacher, and there is no stopping place. The pupils will be continually searching and telling what they find out, and will *ask* whenever they do not know, and the teacher will be often confronted with questions as to the *how, why, where, and what*, which cannot always be answered "on the spot." In every way the pupils are encouraged to *look* and to find out for themselves, and are told only so much as will enable them sufficiently to do this. To see some of these enthusiastic young naturalists almost dragging the pond for specimens, while others are busily poring over books to find out about the butterflies they have just caught, or the crayfish, or the bird which "looked somewhat like a goldfinch," while another is seen to triumphantly deposit in the small aquarium a little fish (sought and obtained by no small effort) with the remark, "I think it is a pike; I'll find out," is very gratifying to the teacher, if somewhat amusing to the uninitiated. Or, if plant life is taking our attention, to discover, as you walk through the yard, *here*, a boy carefully examining the bark of a certain tree, there, another boy explaining to a third the way in which the leaf buds are protected through the winter, while a fourth pupil is bending over a tiny plantlet whose two seed leaves have just opened, and a fifth is on the way to plant something new in our box of "seedlings" beside the corn (which has already been pulled up three times, and its state and manner of growth commented upon)—all of this is also gratifying.

In taking up the study of natural history, in any of its branches, the classification best adapted to our needs is that of Miss Coe, of the American Kindergarten. This is very simple, having been arranged with special reference to children. This classification is given in full in the American Kindergarten Magazine, Vols. II, III, and IV. It is learned by the pupil almost unconsciously, as he is never given a name of any division, class, or species, until observation and talk

have shown him something for which he needs a name, when he takes it at once gladly, because it expresses his thoughts, and he does not consider whether it is long or short.

Permit me to give an outline of my plan of work, and of just what is done during one recitation hour in the class-room, first with an advanced class and then with beginning classes.

Here is a class of pupils who have been in school six years, having a large vocabulary, and using English fairly, who, of course, must have language exercise aside from their special studies. One of these hours for language study we devote to natural history. Last year the class began the study in learning something about the common vertebrate animals. This year because the pupils have asked it earnestly, they have been allowed to study something about invertebrates, beginning with insects. Specimens were in this class so plentiful and easy to secure that enthusiasm soon became unbounded. (In fact, when the annual picnic was talked of a certain place was especially recommended by many of these pupils because there were many insects there—hardly a recommendation for the average pleasure seeker in rural scenes.) A lesson to be committed to memory is never given, nor any set lesson from a book. The recitation hour of one day is devoted to examination of specimens, to draw out the thoughts and information of the pupils on the subject in hand, and to increase their desire to gain more; and to a short familiar talk by the teacher, who is careful to tell only what the pupil cannot find out for himself, and to put into concise and correct form what has already been expressed, more or less clearly, by the pupils. During the talk questions without limit are allowable. Directions are then given for reading from books of reference upon the special object chosen for study. Sometimes this examination and general conversation fully occupy the hour, so that the teacher's talk is omitted, in which case it is given the next day. For an example of the exercise, take a first lesson on insects (which would not be given twice in precisely the same manner to two different classes). Knowing that such is to be the lesson for this morning, and wanting to begin, the pupils come in, some bearing mysterious looking boxes, others rolls of paper in which are hidden some precious specimen, others carefully hiding in their hands something in which they evidently feel much interest. What a collection! a housefly, several varieties of butterflies, three different moths, a grasshopper, several six-legged creatures, as yet nameless to us beyond their general name of insect, etc. The teacher sits down with the class, and the conversation begins, perhaps in *this* way: "What have you found out?" Somebody says, "Every one of these insects has six legs, the moth the same as the fly and the bee." We all look and prove it to ourselves. The antennæ are discovered, and the name asked, then "What are they for?" say several pupils, and others "I think for smelling," "I think for feeling," "I watched the fly, and I think they are for hearing," etc. "How do they breathe?" says some one, and we talk about that, examining a May beetle in which the spiracles are easily seen. Then the eyes are talked about, then a leading question brings up the topic of their early life. Some one thinks they are first little flies, and grow and grow until they are just like the mother. Some one else immediately explains that he has seen the eggs of a certain moth, so they must come from eggs, and so we go on until the mystery of the three changes in the life of an insect has been explained, and with every new discovery there is a

rise in the tide of enthusiasm. Many differences which will later classify these insects more particularly are noted and talked of—as that the moths have long tongues, the beetles strong jaws, etc. When we have spent as much time as we profitably can in this way, the teacher may give a little talk, something like this (using the substance of the conversation and carefully adding what is needed): We have here a number of insects. They look very differently, do they not? We see that they are all alike in some things. All insects have six legs and two antennæ. They have two or four wings—never any other number. Their bodies are of three parts (giving the names of the parts). All insects change three times in life (giving a clear and simple description of the transformation assisted by the cocoons in our collection and the caterpillar provided for the occasion). They have neither lungs nor gills, but breathe through tiny air-tubes which run through their bodies, even through the antennæ and the wings. They generally have compound eyes (explain this clearly). A few insects have simple eyes, and a few have *both* simple and compound eyes. Though they have no bones they have muscles (and we pause to talk about what enables them to use their wings, to walk, etc.). Then the teacher goes on with a talk about the destructiveness of insects in the larval state, etc., but careful not to particularize, as the pupils will *find out* for themselves in the study of such specimens as they will choose, which is better than being told. Directions are then given for using the books of reference, certain ones being assigned to particular pupils with special passages marked for reading. The work of the class now is to take the subject-matter of the talk, their own previous knowledge and the information gained by examination; to add to these by reading, and then to write a summary which is brought to the teacher for correction. Each pupil is provided with a note book. When the summaries have been corrected they are copied into the note books for preservation. Each pupil feels a great interest in his note book, for it is emphatically his own, and he appreciates the labor expended on that which it contains. The day after the talk, the papers having been corrected, they are returned to the pupils. If a misstatement has been made it is read before the class and settled there, and the writer, not the teacher, must correct. A certain part of one paper is sometimes taken before the class for correction in composition. One pupil may be called upon to tell us anything which he has discovered since our yesterday's lesson (and be sure more than one will have something to say), and the class is dismissed. Very frequent reviews are given and in a variety of ways. Sometimes a list of general suggestions is written on the board, and all the pupils answer these upon paper, their answers being corrected by the teacher and the papers returned next day. Sometimes one pupil writes the classification upon the board, while another writes the meaning of the terms used, some of the others write about certain specimens, and still others classify these specimens. At another time the teacher asks the questions and the class answer by spelling or orally. Frequently verses from the Bible relating to insects are repeated, and little poems and stories told. Often these are copied into the note books with the original articles.

Compositions, reviews, exercises, etc., showing actual work of pupils were presented, but for lack of time were not read.

MR. CLARK: I will ask Professor Weston Jenkins to tell us how he has been teaching botany in his institution during the last year.

MR. JENKINS: I have hardly done anything that is worthy of mention. One of our teachers, who was quite interested in the subject, took it up, experimentally, this spring, having completed certain work laid out in the fall. She began it about the first of April, showing the germination of seeds, each pupil being furnished with the necessary seeds and varieties for growing, and then, an interest being awakened, as the buds, leaves, and flowers were opening, the children used to gather specimens, and the formation of the flowers was explained, and the leaves and seeds of trees growing upon the place were gathered, and were shown to the teacher, and the pupils prepared very neat books, with collections of leaves and flowers of the different plants growing upon our grounds, the leaves of the maple, and specimens of its wood, and they were told what are the uses of the maple tree, of the oak, the birch, white pine, and hemlock. They would compare these different woods, consider which was the heaviest and hardest, and which the more easily worked, and what wood was used in different kinds of manufacture, and what in the fitting up of buildings. That is only a beginning. But I feel very much encouraged to enlarge that kind of teaching.

I have also done something in the way of teaching chemistry and physics; not with apparatus or with technical names, but showing the mechanical and chemical properties of, for example, quicklime, alcohol, and so forth; vaporizing and condensing, and showing absorption and chemical union of lime with water, and so forth. But it has been confined strictly to objects and substances which are used in the mechanic arts. I think that this work that is described in Miss Ely's paper is such as all of us may well pattern after.

REV. DR. THOMAS GALLAUDET: In connection with Miss Ely's paper, I desire to ask whether, in the examination of these various objects in the Rochester institution, the pupils are furnished with magnifying glasses or with microscopes.

MR. WESTERVELT: Yes, sir; with microscopes of their own. The class is provided with small microscopes or magnifying glasses, made by an optical company in that city, a small glass standard, with a rod and adjustment, with needles for fine manipulation. They are also provided with dissecting instruments, for cutting the objects they are examining. The interest of this class was very great in natural history. It is a part of our regular school work, and develops naturally from the studies of natural history in the kindergarten.

MR. ELMENDORF: I have been very much interested this morning in this branch of science, because I think that in the upper classes it is one of the best methods of object teaching, to gain language as well as for the knowledge gained. In the last year I had charge of the highest class in chemistry. I began by teaching how to clean different things. I showed them how to clean glass, wood, and metal; how to clean their own hands and how to keep them clean, and how to keep articles which they handled clean without using water, which is sometimes very disastrous in chemistry. Then I began to show them how to clean liquids. They were very much astonished when I first told them that I was going to clean a liquid; that means to filter it. That was really the first lesson which I taught in chemistry—taking some dirty water and putting it in a funnel, and it immediately came through the funnel and out at the other end, just the same as when I put it in. Then I took some sand and put it into the funnel, packed it tight, and poured this dirty water through it,

and it came out quite clean, which surprised them. I explained that to them, and then I took some cotton and put it into the filter, poured some more dirty water through that, and they saw that it came out clean. They were very much surprised. Then I explained that. And I said, "If you did not have any of these things, what would you do?" One of the boys said, "Use a handkerchief," and the boy put the handkerchief in, and it cleaned the water; showing that sometimes, if they were in a tight place they would have to make use of their ingenuity. That is one of the first things to be learned in chemistry. And this gives an idea of how I start in chemistry.

Then, after they had learned how to clean different things I asked them, "Is that water pure?" They did not know what I meant, and I explained it by taking a little water and putting a little salt in it, and asking them to drink it. They did not like it. Then I filtered it, and then they said it would be all right; but when it passed through it tasted the same. I asked them if it was pure, and they said: "No; there is salt in it." I asked them, "How are you going to get rid of the salt?" They didn't know. So I told them to put it into a glass retort or kettle—I always begin with home objects—so I took an ordinary teakettle and put that salt water in, and put it on the stove in the kitchen, and boiled it, caught some steam in an ordinary goblet, and got about two teaspoonfuls of water. They tasted that water, and it tasted no more salt. Then I showed them the scientific instrument called a retort, and a condenser, and showed them how to distil liquids. Then we get just one step higher, and they find out how to purify liquids.

I begin at the very bottom and work up, and after I get to a certain point it is fair sailing afterwards. But if you do not begin with these simple things correctly you cannot do it.

I asked a boy to put a cork in a bottle, and he said it was too large; that he could not do it. I told him he must, and he went to work and cut it the wrong way, and spoiled the cork. I had to show him how to cut that cork—that he must use a file and sand-paper. All of these points that I give you as illustrations are used, not only for the benefit of the knowledge conveyed, but for the training they get. I believe I have taught for five years what I have told you this morning. Then I begin with oxygen. This class have had a very good idea of physics, and understand what attraction, cohesion, and adhesion mean.

I do not believe, at all, in text-books in chemistry for children. Everything should be taught to them by object lessons. I believe they should have no text-books whatever. We should make their text-books. I take some chloride of potash and ask them what that is. They do not know. I ask them if it is a mineral or a liquid. They reply "It is a hard substance; I guess it is a mineral." I ask them to put it into a retort, and they do, and they look into the retort, and there is something black left there; it is changed. So it has overcome its cohesion. Then I ask them what it is, and they do not know, and I explain to them. They have had all of these objects described, everything that they use has been described to them, and they know the name of it, and they must know the name of it, because I make them do the experiments. I make them find out what is the result. A good deal of glassware is broken, but it is worth it, because in manual manipulation, deaf mutes, I think, as a general rule, are clumsy with their hands. I will not allow them to handle my own

microscope, but all of the delicate brass instruments I make them handle. I take up the compound of hydrogen and oxygen, water, and then I ask them what they do with water, and what it is used for, and how they get water pure, and so forth. Then I take up the compound of oxygen and nitrogen, considering nothing that is outside of everyday life. That is the way I begin chemistry. [Applause.]

MR. FRANK, of California: I desire to add something to what Mr. Clark has been explaining, in the study of natural history. I have here, in envelopes, sets of colored pictures, "Prang's Natural History Series for Schools and Families." I think there are a dozen in a package, showing the different classes of birds and animals, and with each one of these sets is a large picture of one of the species, to hang upon the wall. These are in little pasteboard holders, for convenient use in the class-room. They are designed to be given to the pupils to handle and examine, showing the nature and peculiarities of each class of the species.

MR. CLARK: I will say a few words about how I think botany ought to be taught. I should begin the study of botany with a young class by putting into their hands a certain number of seeds and bulbs, and telling them to plant them, giving them quite a number, so that every day, possibly, we could dig some of them up to see the changes that had occurred in those seeds, and draw their attention, perhaps, to the fact that some seeds begin this change very much sooner than others. Then, as those plants grow, I should call their attention then and there to the difference between monocotyledonous and dicotyledonous plants. That word is a pretty long word; but if you begin with them by building it up from its derivation, they will get hold of it. And I rather think deaf mutes like long words. I have frequently had them stop me to spell out a word of thirty or forty letters, and then make the sign for it.

MR. WESTERVELT: How can they explain it without a sign for it?

MR. CLARK: I would show them the thing itself right there, and then perhaps I might hit on some other sign for it, to save time in the class-room. From the very first, I would start with these pupils, by developing in their minds an idea of classification. We have it, more or less, but the deaf child does not. He looks upon things as units. You tell him, "That is an oak tree," and it is a long time before he realizes that there is another oak tree over there also, even though it is of the very same species. And when you get a different species, it confuses him. I have heard deaf mutes say, "This tree is not like that tree; the leaves are different in size. You say they are both oak trees. I cannot understand it." We must, from the very start, get them to classify. And I should follow pretty nearly the present accepted classification in botany. All you have got to do is to give them the names for those things.

Then, next, at the proper time of the year, I should bring flowers, for the classification in botany depends very largely upon the efflorescence of flowers. I should bring this, particularly, to their notice. I would teach them the difference between the stamens, the stigma, the style, the ovary, and all the different parts of a flower, and show them how these things change their forms; that while this flower has a style and stigma, that is very different from this other flower, still there is a general family likeness, so that a person who has examined a few will never, under any circumstances, confuse the style with the stigma, or the ovary of the flower.

Then, when you have taught them that, you have taught them the first step in the analysis of the flowers. Then in the very first flowers, draw their attention to the fact that in botanizing, they should keep away from garden flowers, mostly. A child, in its own attempts at botanizing, will pick up one of our garden flowers, where the stamens and style have all been changed to petals, and they are greatly confused by it. In the domestication of, or what we call "improving" flowers, changes are caused which are very puzzling to the young botanist. In studying botany for myself, before I went to college, I was hopelessly confused, from the fact that I went out into the garden and picked one of the double flowers that gardeners think so much more beautiful than our other flowers, and I could not see anything that the book said ought to be there. With that one hint, you can get along very soon to a point where the class of deaf mutes will recognize, not the species, perhaps, but the genus, of all our more common wild flowers.

Next to this I should take the ovary, in its different shapes, on which the next step in the analysis of flowers very largely depends. This it is much more important to teach than the difference between monopetalous and polypetalous flowers. They will see that just as soon as it is pointed out to them. And after this I have found Wood's Analytical Tables useful, and have used them with the sixth year class without any particular difficulty.

Having once got the boy or girl so that they see they can go out into the fields and pick any flower, and come back to their book and find out exactly what other people call that flower, you will be surprised to see the enjoyment they will take in it.

Professor Gray himself, perhaps our most noted botanist in this country, says that a person who has analyzed three hundred flowers independently is entitled to the name of botanist. It is not very much of a work to do this, after you have got through with the preliminaries. Take my high class boys, and they would do it in a year. Having a class started in that way they will never give it up.

MR. NOYES: What standing do your pupils have before you introduce botany?

MR. CLARK: I never teach it under six years; but I think I could teach it to a class beginning their fourth year. I never did teach a young class but one year in my life; since then I have always worked above the fifth or sixth year.

MR. NOYES: Do you recommend the use of some text-books?

MR. CLARK: There are several, but I should not like to recommend any particular one. I never use a text-book myself. The teacher, of course, ought to be familiar with the subject, and with those I have helped to some extent I have always found that they took Wood's. The successful use of Gray's Tables depends upon a knowledge of the peculiarities of the seeds very much, and Wood's do not so much. The peculiarities of the seed seem to be very confusing to young people, and they do not often have the seed when they get the flower; they have to wait, or make a microscopic examination, and it is often very troublesome to get at.

MR. NOYES: I am very happy to say that this is a very proper subject, in my view, to come before us. I think it is not the practice of many schools for the deaf to take up the subject of botany. When I was a boy, in the academy, under William H. Wells, the author of Wells' Grammar, he desired me to study botany. I objected seriously,

and told him I thought that would be very well for little girls who wanted to study flowers and paint pictures, and so forth, but for a man that was going to be a business man, I did not think it was the proper thing. He urged me, very strongly, to join the class, and said that after a given time if I was still of the same mind, he would excuse me from the study. I accepted his proposition, and commenced it, and I have ever since been very grateful to him for urging me to take up botany, against my wish. I was quite stubborn about it. In my first trip to California, there is nothing that has interested me more than to look out of the car windows to watch the trees, with their different forms, different shaped leaves, and different character of bark, and the color of flowers, and to remark—so far as I could determine it, what the several trees and plants were. It has been, from year to year, a source of perpetual joy to me. And I know that those children who use their eyes as the deaf do would derive great benefit from a short period of such study. I do not think it is best to protract it. I think we have been accustomed, heretofore, to giving more time to the study of geography than properly belongs to it. The course and location of every little river is a matter of small account. If you have an idea of the general system of streams, mountains, and leading points of a country, that is about all that ordinary men need. And a portion of the time that is usually given to the study of the capitals and cities and towns, and the peculiar productions of a State or portions of a State, is a matter that can be studied up at some other time. Instead of giving so much time to geography, give a portion of it to botany, and open up some of this richness, this vastness, and this great variety that is to be found in the study of botany.

MR. WESTERVELT: We have used Gray's "How Plants Grow," very satisfactorily, for our text-book, though of course we have relied upon the teacher as the text-book for botany. And the work that the children have done out of school is more important than the study of the text-book, although, of course, both are necessary. We find that Gray's text-book is simple, easily understood, and very satisfactory.

MR. WESTON JENKINS: That book gives a classification which is only a skeleton. I think that what makes the study of botany interesting is, the uses of the plants, how they grow, and what they are good for after they have grown, and that text-book does not give it.

MR. NOYES: Dr. Hooker's "Book of Nature" is a very excellent one, and the language is excellent for our ordinary deaf mutes.

THE CHAIRMAN: The following question I take from the question box: "What is the best method of conducting examinations?" I will call upon Mr. Crouter to reply to that question.

MR. CROUTER: It is difficult to say which is the best method. I think our methods are pretty good ones, and I will give them in detail. The questions for examination are all prepared by myself. I do it after consulting with the teachers as to the ground that their pupils have been over. They do not give me questions, or sets of questions, to ask the pupils in examination at all. I prepare the questions, endeavoring to find out in an independent way, the amount of knowledge that the pupils have of the work that they have been over. I do this in language, in arithmetic, and in all branches of study. I try to ask questions in a way that will show just how far the pupils have been grounded in the work that they have been over. It is a very easy matter to make an examination a mere showing of memory. The pupils may go over a certain amount of arithmetic or geography, and

a certain number of exercises in language; and an examination that merely calls out how much of that work they remember, is, to me, no examination at all.

MR. DUDLEY: Do you pay any attention to the language? For instance, in an examination in geography, if the answers are all correct, if the language in which they are expressed is not perfect, what would you mark them?

MR. CROUTER: I have thought that in an examination of geography, or any other branch of knowledge, the facts only should be taken into consideration; but my experience has shown that that was a very poor plan, and the children are now marked for language in every branch, as well as for knowledge in that branch.

MR. NOYES: Do you aim to make your questions topical?

MR. CROUTER: In some instances. I first indicate a number of actions that the teacher conducting the examination must perform in the presence of the class. Then there is sentence writing, and then there is descriptive writing. I do not have much story writing in our examinations. It is impossible for the teacher to tell a story in signs that does not indicate, to a greater or less extent, the language to be used, and it is merely putting down what the teacher has said in signs. We give them topics to write about that call forth a better knowledge of language than telling a story would.

MR. M. T. GASS: In examining a child in geography, why are his defects in language charged to his geography?

MR. CROUTER: Because we found that otherwise the pupil was likely to be careless in his use of language in such answers.

A MEMBER: How many examinations do you conduct in a year?

MR. CROUTER: Two; one on the first of February and the other towards the last of June.

MR. A. S. CLARK: Suppose that in your examination papers you came to an answer in which the pupil had written, word for word and comma for comma, the language of the text-book, or, as I believe you use no text-book, the language given him by his teacher, and another one who, evidently, is writing, not from a crammed lesson, in that way, but from a real appreciation of the subject, which he has made his own, is putting it in his own language, which is more or less defective, how do you compare those two?

MR. CROUTER: In preparing an examination I endeavor to put the questions in such a way that they would find it difficult to introduce the language of any lesson in their work. However, in the examination in language, we have a method which we think obviates that difficulty to a considerable degree, and we do it in this way: In an exercise in language—for instance, it might be a description of this room, or of some object in natural history—the teacher, in marking, reads it over, and in accordance with his judgment of the manner in which the work has been done, he gives the child a certain credit mark, one hundred being perfect. If he thinks he has done very well, he might give seventy-five. The next step is to go over, very carefully, and correct every error in that work, and the errors are subtracted from one hundred. The two are then added and divided by two for the result in that particular part of the language exercise or language examination. So, while one pupil might write but little, and write more correctly, and another pupil might write a great deal, their work is balanced up by the judgment of the teacher in giving

them a certain credit for style and for the general manner in which they have done their work, taking their other mistakes out.

MISS WRIGHT: If you have a pupil that is very proficient in arithmetic and to whom it is almost impossible to teach language, and you come to fractions, and you give him examples and he performs the operation correctly and gives the analysis so that you are satisfied that he understands the arithmetic of the example but does not use perfect English, what would you take off for that? When he is perfect in everything except a deaf muteism in the language?

MR. CROUTER: We give a certain credit for arithmetic, and then whatever errors of language they make, maybe ten or twenty, they are deducted from their marks in arithmetic. The pupils understand that and it makes them more careful. Before we adopted this plan there was a great carelessness in the use of language in the examinations in geography and other studies, and hence this marking in language in every branch.

MR. NOYES: Do you prepare all the questions?

MR. CROUTER: Yes, sir. The teacher who conducts the examination does the marking, but no teacher examines his or her own class, and no teacher examines a class of the same standing as his or her class.

MR. NOYES: What is the object of these examinations?

MR. CROUTER: To encourage the pupils, for one thing, and we grade our classes by them to a large extent.

MR. A. PRATT, of Ohio: Instead of having one person to examine the papers and mark each class, it might be well to have the teacher of the class and two others, and in this way a more correct and just marking might be secured.

MR. ELY: In our school each class is examined by a committee of three, the Principal being one. The teacher of the class has nothing to do with it, except to indicate how far the class has gone during the year or half year under review. In our examinations in history and geography we do not discount for defects in language, provided the statement is full and accurate. Any inaccuracies of statement are deducted, and the misspelling of proper names is also deducted, but beyond that there is no account taken of the language, provided the statement is accurate and full.

MR. PRATT: We all have a class of pupils in our schools who are unable to go over the ground allotted to any grade. What do you do with that class of pupils? Do you let them go on with the higher grade?

MR. CROUTER: No, sir; we keep them in the grade where they ought to be, regardless of the time they have been at school and regardless of examination or anything else. Our higher classes are composed of pupils who ought to be in them and no others. In my experience, it is impossible to secure perfect grading. You may start out in the beginning of the year with a class well graded, and before you have been at work three months you will find that you ought to regrade. We cannot spend all our time in regrading and we do it only once or twice a year.

MR. TATE: Do you find any difficulty in advancing those pupils, in order to keep the lower classes from being too full?

MR. CROUTER: No serious difficulty. Our classes average about fifteen.

THE CHAIRMAN: The next question from the box is, "Will some

one explain how to teach the time of day?" I will call upon Miss Wright.

MISS PHEBE WRIGHT: I can give my method. I generally try to have a clock that the children can handle. I think that deaf mutes like to handle things. Then I put upon the board a diagram of a clock, and write the figures of the clock. I take the minutes and make them the same as on the clock, and write over that "Minutes," and take the space of an hour, and write over that "Hours;" so they can see that there is a short hand and a long hand, and that the short hand indicates hours and the long hand minutes. I like to have a clock that goes, in my school-room, but I do not generally have one. I begin with twelve o'clock, and teach them that when the two hands come together, that is twelve o'clock; and I have every one write what time it is—"Twelve o'clock." I keep at that for a little while, until they understand it. Then, from there I move it to five minutes after twelve—moving the large hand, and the small hand a very little, showing that that does move. And I keep on in this way until I get to half-past. I go over that several times before I take the half-past. Then I write upon this diagram, as the hand goes around, "after" or "past"—using only one of those words, generally "past." Then, on the other side of the diagram I write the word "to," so that when the large hand comes round it is after the time, and they see it there. I keep drilling in that way for weeks. Then I rub out the diagram, and take a clock; or, if I have my watch where they can all see it, I stop it suddenly and ask them what time it is; and one pupil reads the time; and if he mistakes, I give the watch to another boy, and he reads the time; and if they all make a mistake, I read it myself. But I find very little trouble in that way. In the course of three or four months the majority of my class learn to read the time correctly; and I have them write sentences on the board in which the time is expressed. I put the clock at twenty minutes after one, and ask a boy what time it is, and make him count with his fingers "twenty." At first I do not make them say anything between five and ten minutes, but after awhile I have them give the exact number of minutes.

MR. CROUTER: I think every school-room ought to have a clock, and a good large one. But I have found it convenient, in teaching this, to use one of the little cards used in offices, saying "Will return at." They have hands upon them, and you can move them to any time of day. They are very useful in teaching the time of day, and just as soon as they learn the use of it, I refer them to the clock.

MR. CONNER: I have found it convenient to use a toy watch for the same purpose. I think it is also well to teach railroad time—8:30, 8:40, and so forth—so that they can understand it, taking it from railroad time-tables, that the hour is first stated and then the minutes.

MISS SUE ELLIS: I think there is a good opportunity right there to bring in a little language. A great many of my pupils write it as "8½," using the fraction. Then I say to them, "You have made a mistake; you ought not to use the figures '8½,' but you should say 'It is half-past eight.'" I find that has been of great use, and I have had a good deal of trouble and hard work in breaking them of that habit.

PROFESSOR MOSES: In teaching young children, I begin with "twelve o'clock," and then teach them hours, not considering the minutes at all, so that they can readily recognize the hours. Then I teach them the difference between "A. M." and "P. M.," and then begin with the minutes. I take the quarters and then the half, and then the minute

"5," "10," "15," "20," and so on. But I think you can obviate the trouble of the confusion of the short and the long hand, by simply indicating the difference until they can readily tell the exact hour of the day. Then make the distinction between "A. M." and "P. M.," and then take the fraction. I think you should teach them but one thing at a time. Otherwise they get confused.

THE CHAIRMAN: The next question is: "How to break up the habit of talking among the pupils in school, and how best to control hard cases—suppose the teacher a lady—and how punish great offenses." I will call upon Miss Dutch to respond.

MISS DUTCH: I think that it depends altogether upon the age of the class. There are a great many different ways, and I could not say which is the best way, but can give you my method. I think the great secret is to keep them interested and busy. Of course there are some that will leave their work and talk. In my own class I have a programme upon my slate for each day's work. I say, "First we will do such a thing; then, 'second,' and so on. 'When you get through if you have no slate or anything to work on, or anything to do, pick up something and read it, and after awhile I will ask you to tell me what you have read.'" In that way some of them have been helped a great deal, and do not have time for talking.

Sometimes, though, I have had pupils who would leave their slates and books, and talk anyway. I have used various methods; have studied the dispositions of such children, a good deal, and I have sometimes stopped everything I was doing, called the boy up who was talking, and had him stand in front of the others, and have all of the children stop and look at him while I made him talk until he got sick of it. When he would stop, I would say, "No, keep on, you want to talk, and now we will only attend to one thing at a time, and you talk, and we will pay attention to you." I have sometimes kept them from their play and stood them in a corner and put them to do some disagreeable tasks. And then we have our reports, and we can shame some of them by giving low marks, but with others that has no effect. I have many times come to a point where I thought I would like some information on how to control hard cases, myself. But I believe the best way I have found is, when you have unusually hard cases, such as we all sometimes have, to deprive them of some pleasure they are fond of. Last year I had one or two boys who belonged to a base ball club, and who were very fine players and very necessary to the club. They were to have a match game upon a certain Saturday, and I know of two boys that didn't go to that match game. I found that worked very well.

Then another thing that we used very effectually, for awhile, certainly, was when our new gymnasium was opened, they were all very eager to go into it, and those who were disobedient, or who had committed any offense in school, were reported, and kept from the gymnasium.

That had a good effect. I once had a boy in my school who would make faces. I would call him up and have him make some faces for our amusement.

MR. GOODALL, of California: I would like to give my experience with one boy whom I practiced on for nearly two years before I could keep him still, and when I found out how to stop it, I did it in about five minutes. I had scolded him, marked him low, reported him to the Principal, and he was kept from going anywhere on Saturdays,

and still his Irish wit and fun would come out. For instance, one day Professor Wilkinson asked how many boys there were in that building, and he immediately replied, "Seventy-five and three quarters." The Professor asked him how could there be three quarters of a boy, and he replied, "There is a boy with a leg off." He would trouble me beyond all expression. I do not allow any talking whatever in my class. But although he did not disobey me in that way, he could make everybody else laugh with some movement or some wink, or by some means. At last I stopped short with him; I disregarded him entirely, only I didn't allow him to talk. I left him for two days without calling upon him for any lesson, and without looking at him. He attempted to talk to me, but I could not see him. He finally wrote me, all of which I disregarded until I had accomplished my purpose. Finally he came to me while I was at the slate, and asked me why I would not answer him. I told him that I was here to instruct and to help good boys; that I had nothing to do with bad boys. After an hour or two he piteously asked me to help him with some example. I commenced by being pretty stern with him—answering him shortly—until the time arrived when I told him that I was not offended with him; that I desired to see his improvement as much as that of any boy in the class, and would devote my time to him as readily as to any one when he treated me as the others treated me; hereafter if he desired to get on in school he should behave himself, and that every time he offended that he should lose one day in school; that for that one day I would leave him entirely. And I kept that up, and I never have had to ignore him but one day since, and that was about seven months ago, and he has been one of the best boys in my class since. [Applause.]

THE CHAIRMAN: The next question in the question box is one addressed to Professor Booth: "Do you use analysis for problems for a full understanding of the combinations of symbols given?"

MR. BOOTH: Yes, sir; to be sure that the problems are understood. But we must take a course of years before they fully understand the symbols; the figures or operation of the figures, as representing processes with numbers. We use language that is only a little more difficult than they themselves are able to write, and they make progress by their necessities.

The great danger in teaching the forms of analysis is that they learn them merely as an order of words—mechanically. They write the analysis to-day simply because their teacher did it yesterday. They memorize the analysis. We should avoid that. I should say that before giving these forms of analysis wait until the seventh, eighth, or ninth year. My experience this past year with a six-year class, with my system of instruction in arithmetic, in using these forms of analysis, has been quite satisfactory. I did not write the form of analysis upon the board for them to learn fully, but I simply performed the example before them, and, in signs, suggested what I wanted them to express in language. I would say, "If a horse," or "If this apple is worth two cents," and so forth; and in that way I tried to give them an idea of the subjunctive of condition, the subjunctive "if." Then I say, "Suppose one person," and so forth, and they go on and analyze it, taking my supposition, "If one apple is worth two cents, five apples must be worth five times as much," and so forth, and go clear through to the conclusion "therefore," and so forth. I give that in signs, and they had very little difficulty in get-

ting it. The next day I gave them another problem, and asked them to analyze it in the same way they did the day before, and some of them did it. The next day again nearly all of them did it.

So I say that they have very little difficulty in using these forms of expression when they have the idea as they may have it by my method of teaching arithmetic. If they get the idea clearly in mind of numbers and the relations of numbers which the language is intended to express, they have very little difficulty in using the language to express those ideas which they have clearly in mind. First give them the ideas, and then the language. Do not give them the language first, and let them think that from the language they may get the ideas. It is contrary to nature.

THE CHAIRMAN: The next question is: "How to Teach Relationship; that is, in reference to its use in letter writing; how avoid such mistakes as the following: A letter beginning 'My dear sister,' and signed 'Your affectionate son'?" This is referred to Professor Westervelt.

MR. WESTERVELT: I should begin when the child first comes to school to teach him relationship. It is easy to teach very small children the relations they hold to the father and the mother; that the boy is a son and the girl a daughter. Where they make such mistakes in a letter I know of no better way to correct them than simply to point them out to them, and ask them if they are correct. They usually know, because they have been told oftentimes. Then let them make the corrections themselves; or, if they are not able to correct them, let the other members of the class correct them. It is true that such mistakes are common; but they are only the result of carelessness. Hardly any peculiar method is necessary for correcting those errors, any more than any others.

MR. PRATT: I believe one of the causes of these mistakes in letter writing is that what is everybody's business is nobody's business; that it is not made, as it should be, the special work of some one year to teach the various forms. I have been surprised in the last three years to see how many letters come to the Matron of our institution commencing "My dear Helen," and how many were sent to the Superintendent giving his first name, as though they were writing to their brother or some member of the family, or some of their dearest friends. I think it should be made a special exercise during the year, of some one class.

MR. CROUTER: We make letter writing an exercise through almost all of the years of the whole course.

MR. ELY: The next question is: "I once asked of a certain teacher which was, in his judgment, more satisfactory, to teach the present or the past tense, and he said 'The past,' but, when I asked him why, he could not tell. He further said, 'I should try to see for myself.' So I ask of you two questions: First—How long have you been teaching the present tense, exclusively, and how long the past tense, exclusively? Second—In your judgment, which have you found to be more successful, and how or why?" This is referred to Mr. W. A. Caldwell, of Indiana.

MR. CALDWELL: I think this subject has already been discussed. The past tense seems to me to be the most natural of any tense. But since my first work in teaching, I have never had a young class, myself, and I hardly know which to advocate. For my own part, I

prefer the past tense. If we ever have any tense in our minds I think it must be the past tense, in thinking of any action. We do not think of it as present, but it has already past. But this is merely a matter of opinion.

Adjourned to half-past seven o'clock P. M. *

AFTERNOON SESSION.

President Gillett, in the chair, called the meeting to order.

Prayer was offered by Rev. Mr. Masters, of San Francisco.

The Secretary read the minutes of the last meeting, which were approved.

THE CHAIRMAN: The next paper will be "The True Combined System of Instruction," by Mr. Crouter, of Philadelphia.

THE TRUE COMBINED SYSTEM OF INSTRUCTION.

The relative merits of the oral, manual, and combined methods of instruction, as pursued in American institutions for the deaf, have been so frequently and fully discussed that their further consideration may possibly appear to many superfluous; but, in view of the fact that these discussions have, as yet, led to no conclusions that have been accepted by the adherents of the different methods, I trust that a brief exposition of the defects of certain of them, and of the advantages of a system which I am led by experience to believe possesses the merits of all of them, with the smallest possible proportion of the defects of any, may be of interest to the members of this convention.

In the "American Annals of the Deaf and Dumb," of January, 1882, Professor Fay, of the National Deaf Mute College, says, after briefly describing the oral method of instruction: "The combined method is not so easy to define, as the term is applied to several distinct methods, such as: (1) the free use of signs and articulation with the same pupils and by the same instructors, throughout the course of instruction; (2) the general instruction of all the pupils by means of the manual method, with the special training of part of them in articulation and lip reading, as an accomplishment; (3) the instruction of some pupils by the manual method and others by the oral method, in the same institution; (4) although this is rather a combined system, the employment of the manual method and oral method in separate schools and under the same general management, pupils being placed in one establishment or the other, as seems best in each individual case."

In this concise yet comprehensive statement, Professor Fay sets forth very clearly the salient features of the four distinct methods of instructing the deaf that are severally and collectively included in the term, "The American or Combined Method."

Beyond pointing out their advantages and commending them to the serious attention of the members of the convention, and especially of those who are at the head of large schools, where a system of classification according to the natural powers of deaf children can be most fully and profitably carried out, I shall have but little to say concerning the last two of the methods enumerated; but the first and second are so fraught with what, after a somewhat lengthy personal experi-

ence, I have come to believe is hurtful to the best interests of the deaf, that I propose to state, as briefly as the nature of the subject will allow, my objections to them, and to urge their discontinuance as a part of the American system of instruction.

The first of these methods seeks, by the free use of both signs and articulation, by the same teachers, in the same classes, to instruct all deaf children in spoken and written language and other branches of study. It is to this and to the succeeding method that reference is most commonly made when the term "combined method" is used. A more appropriate name for it would be, in my opinion, the mixed method, for there can certainly be no combination between two elements of a system of instruction which not only do not work together for a common object, but positively antagonize each other. A teacher working under this method not only tries to teach, by the aid of signs, the ordinary branches of a common school education, which, with deaf children, is a sufficiently difficult task when performed under the most favorable circumstances, but, also, attempts to impart, as a separate branch of study, a knowledge of articulation and lip reading. Here we have two entirely distinct and independent objects to be attained, each of which ordinarily demands the whole time and attention of an earnest instructor for its accomplishment. He then must be twice a man who, unaided, can bring about their satisfactory fulfillment. Mark that the purpose is not to give instruction orally in the ordinary branches of study (this is done by manual means), but to teach articulation and lip reading in addition to them. Time thus devoted to articulation and speech reading, as an accomplishment, is time taken from the other branches; it is insufficient for the attainment of the object in view, and, as a result, the child usually leaves school with imperfect powers of articulation which he soon loses from a disinclination to use them (which disinclination arises principally from his own knowledge of his imperfections), and, frequently, an inadequate knowledge of other and more essential branches of study.

Oral and manual instruction cannot be successfully imparted in the same class. The methods are diametrically opposed to each other, and when pursued thus closely together they expend their powers in counteracting the influence for good that each possesses. Under this form, the semi-mute, to whom the oral method is obviously best adapted, falls gradually into habits of manual communication with resulting detriment to his speech and speech reading, while, to the congenital mute, the time thus devoted to articulation is ordinarily time wasted. Another defect of this method lies in the fact that it brings together in the school-room two greatly dissimilar classes of pupils. Very often there is a greater dissimilarity between the semi-mute and the congenital mute than between the semi-mute and the hearing child. A well known English writer has said that a child learns more in the first seven years of its existence than in all the rest of its life. While this assertion may be somewhat extravagant, it is certainly true that the development of a child's mind is proportionately much more rapid during the first four or five years of its life than afterwards, and the child who, during these years, has been in full possession of all his normal faculties, will have a better developed mind and possess greater mental powers than one who has been deaf from birth. This being true, different methods of instruction are required for different classes of pupils, if each is to

make the fullest possible progress. For congenital mutes, minute explanations and constant repetitions are necessary which to semi-mutes are generally superfluous and irksome; the former are slow of comprehension, and have constantly to retrace their steps; the latter are quick, and anxious and able to press forward rapidly. Thus it happens, when the two are brought together in the same school-room to receive the same instruction, the semi-mute cannot make as rapid progress as he would if unimpeded by those who cannot keep step with him, while the true mute, in struggling to keep up with his more favored classmate, suffers not only from the disadvantage of unequal mental development, but the added one of imperfect training, the result of a defective system of classification and improper methods of instruction. The semi-mute chafes at the delay, and gradually loses interest in his studies, while the congenital mute becomes discouraged, and finally sinks into a state of indifference, from which he is with difficulty aroused.

As for the teacher, he is but human, and cannot serve two masters in the school-room any more effectually than he can out of it. His desire to make a good record as an instructor tempts him to devote his time to the most progressive portion of his class, to the neglect of those most worthy of his best efforts. The mischief that results is not the fault of the teacher, but that of the system under which he is compelled to labor; and we think we but state the truth when we assert that, to the conscientious teacher, this method is the source of constant harassment and painful misgiving concerning the best welfare of his pupils. Professor Storrs, in an able article in the "American Annals," says: "As a teacher, then, having regard only for the best work of my class and to the maximum of advantage to the most needy, and I may add, the most interesting portion, I confess I am always unfeignedly sorry to see any semi-mute, however bright, claiming any portion of my time and effort. I know that such a pupil does not need, in any special degree, that peculiar instruction which it is my privilege to attempt to give to such as do need it." There are, I believe, few teachers who do not echo these sentiments of Professor Storrs. They appreciate more fully than any one the unequal contest the two classes are waging, and yet, though their sympathies may go out to their struggling deaf-mutes, they find themselves compelled, by the necessities of their position, to neglect the weaker for the stronger, the striplings in knowledge for their more robust competitors.

The second form of the combined method, as defined by Professor Fay, is that wherein the general instruction of all the pupils is carried on by means of the manual method, with the special training in separate classes, of a part of them, usually the semi-mutes only, in articulation and lip reading as an accomplishment. This appears to be the most popular method of instruction in America to-day. It is also, in my opinion, the most mischievous, for it is open to all the objections urged against the previous method, and several additional ones peculiar to itself. Under it the special accomplishment of articulation and speech reading is gained, if gained at all, at the expense of attainments far more important and practical to the pupils to whom it is generally confined, and the general progress of the rest of the class is very seriously interrupted. The training semi-mutes receive in this way very often fails to give them even a moderate dex-

terity in speech and speech reading. A comparison of the attainments of pupils in schools where their whole training has been oral with those of similar standing whose training has been of the intermittent character of the so called combined method, conclusively demonstrates to me the superiority of the former in articulation and speech reading. This statement may seem extravagant and unwarranted by facts, but, after a careful and somewhat extended examination of the results accomplished under pure oral training, and combined training, I am bound to admit that with some exceptions, pupils trained under the former method excel in these two respects.

And this, in the nature of things, cannot be otherwise. Instructors in oral schools are just as earnest, enthusiastic, painstaking, and capable as are the teachers of articulation in sign schools; their pupils are naturally just as bright and receptive, and why should they not accomplish more in this direction, working four or more hours a day, than we, under the combined method, working a half, or perhaps one hour, a day. To expect any other result appears to me absurd. Besides, the constant means of communication in the former case being by the voice, the child comes to look upon it as the natural and only right means of communication; while, in the combined school, the pupils being constantly surrounded by those who use signs, and receiving a great part of their own instruction through the medium of the same language, they soon acquire a dislike for oral instruction, and practice their powers of oral communication to a very limited degree only. They look upon it as an imposition, an irksome task from which their schoolmates are excused, and very often are found in no happy frame of mind when the hour for articulation work arrives. This, of course, makes the work of the teacher all the more severe; he has to work against the grain, which is no pleasant addition to the other difficulties of his position. Indeed, considering all the disadvantages under which they labor, it is surprising that teachers of articulation working under this method accomplish as much as they do.

While this oral work is going on in the articulation-room, the teacher from whose class the pupils have been taken is indulging in thoughts not in the highest degree complimentary to an arrangement that daily breaks up his work, and is often perplexed beyond measure how best to fill in the time with so many of his pupils absent. He cannot go on with his regular course of instruction, and, consequently, a large portion of his class is obliged to suffer for the doubtful advantage afforded to a few of its members.

In short, it may be said of this form of instruction that the pupils dislike it; the teachers dislike it; it fails very largely to accomplish what it attempts; and it is a decided hindrance to the general progress of both manual and oral work.

If the experience of others confirms the truth of this picture, it is certainly time that some remedy were provided.

To me, the remedy is a very simple and effective one, and, I am glad to say, is embodied in the last two forms noted in Professor Fay's definition of the combined method.

Under the first of these two forms, oral instruction and manual instruction are given in the same institution, but in separate classes, the pupils being taught by one means or the other, as in the judgment of the Principal may appear best—manual instruction being given to

those who should be manually taught, and oral instruction to those who may most profitably be taught in that way. Under this arrangement, the evils attendant upon the two first mentioned forms largely, if not wholly, disappear, and each child enjoys that form of instruction best suited to his condition.

In the institution which I have the honor to represent before this convention, this form of separate oral instruction has been pursued in two of the classes in the main school, for three years, with gratifying success. In one of them, the youngest, the pupils may be regarded as being congenitally deaf; for, if they were not born deaf, they lost their hearing so early in life that no trace of speech remained when they entered the school; the other consists mostly of semi-mutes and two bright congenitals. Although no attempt has been made to restrict these children in the use of signs out of the class-room, their progress in articulation, speech reading, language, and arithmetic has been highly satisfactory. Indeed, I am inclined to the opinion (the future, however, may prove that in this I am wrong) that the use of signs on the grounds, in the play-rooms, and in the chapel has been an advantage to them in the way of mental development. The progress of *these pupils* is to me a matter of deep interest; if it continues uninterruptedly to the end of the course, it seems to me the possibility of prosecuting successful oral work in a manual school will be proven beyond a doubt.

There is an objection (I am willing to concede a serious, though by no means a fatal objection) to this form of instruction, arising from the fact that the pupils who are thus being instructed orally are constantly subjected to the seductive influences of signs. To many who favor the pure oral method, this would appear an insurmountable objection, but with the experience I have had upon the subject, I do not so regard it, and maintain that, if not equal to the last, it is at least vastly superior to the first two mentioned forms. Under it, the congenital mute is not subjected to the discouragements that arise from constant competition with those who possess superior natural advantages, and the semi-mute is not retarded by those who are less quick of comprehension than himself; the teacher is not tempted to favor one pupil at the expense of another, and is not subjected to daily interruptions of his work; and the progress of the semi-mute in articulation and lip reading is much more rapid and permanent.

But the last form mentioned by Professor Fay affords, in my opinion, the best possible system for the instruction of the deaf. It provides instruction in separate schools, under the same general management, for both classes; those who can best be instructed manually being so instructed, and those who can best be instructed orally receiving oral instruction. The advantages of a school so organized are worthy of serious consideration. The question whether the child should be instructed orally or manually presents no disturbing difficulties since, being left to the impartial and unprejudiced judgment of the head of the school, it is solved solely with a view to the best interests of the pupil, and without any reference whatever to the discordant claims of rival methods.

It cannot be denied that, organized as most of our schools are at present, many children are compelled, owing to the selfish interests of the advocates of the methods under which they are being instructed, to undergo a course of training wholly unsuited to their condition. On the one hand are the adherents of the pure oral method, who say:

Teach all orally—any deaf child that can be taught at all, can be taught to speak. And on the other hand are those equally extreme in their views who maintain that all should be instructed by the manual method, with articulation and lip reading thrown in as an accomplishment; that to attempt more is a waste of time, and must result in great loss to the pupil in the way of mental development. And in attempting to prove the correctness of their theories, both classes of instructors do great injustice to a large proportion of the children confided to their care.

Surely the time has come when all may yield somewhat in their extreme views, and unite upon a surer, truer, and more practical system of instruction than the one they now advocate; one which, while giving the greatest freedom as to method, will secure that kind of instruction best suited to each child. This system, which at the head of this paper has been called the True Combined System of Instruction, includes, under one management, manual instruction, pure and unadulterated, for all who may most profitably be so taught, and oral instruction, pure and unadulterated, for all who can most effectually be educated by that method. It discards all attempts to provide accomplishments of any kind, and confines itself to what appears wisest, best, and most practicable for each individual case.

For all practical purposes, and in order to secure immunity from error in the choice of methods, I would divide the deaf into three classes, the congenitally deaf, the semi-deaf, and the semi-mute. With the first I would include those born deaf, and those who lose their hearing from accidental causes very early in life, say within the age of three or four years. These, for the most part, I would instruct manually. The semi-mute and the semi-deaf, and such of the congenitally deaf as appear particularly bright and quick to learn, I would instruct orally. A few months' or a year's trial will enable the Principal or Superintendent to decide whether a mistake has been made in any individual case, and if so, a change should be quickly effected. But having definitely decided on the method best adapted to each pupil, let that form be adhered to. If the child is to learn to speak, let speech be its means of communication, and not signs or writing or spelling; if, on the other hand, speech is believed to be impracticable, dismiss all attempts to teach orally, and resort fully and heartily to manual methods.

After a trial for several years of the second method of instruction as defined by Professor Fay, the managers of the Pennsylvania institution, deeming the results obtained by it unsatisfactory as regards articulation and speech reading, determined to make a trial of the pure oral method, under the same management but in a building separate from the main institution. Accordingly, an oral school was organized at a convenient distance from the parent school, and placed in charge of a principal teacher and several assistants. The school passed through the usual vicissitudes of all such experiments. It had its friends and its foes. The former stoutly maintained that all deaf children could be taught orally, while the latter contended that very few true mutes could be benefited by that method, and that results would never warrant the outlay of time and money necessary to attain them. Happily, neither side was able to carry out its extreme views, and with the lapse of time more moderate and conservative counsels began to prevail; for, while the results were not such as its most ardent friends had expected, still, enough had been done to

fully warrant the continuance of the school. It was, therefore, reorganized and brought more into harmony with the parent institution, thereby securing, as is believed, the greater efficiency of both. It is believed that a large percentage of our pupils, namely, the semi-mutes and the semi-deaf, and such of the congenitally deaf (few in number, probably) as are capable of receiving oral instruction, can and should be orally taught, and that all others, forming, to be sure, the majority of the pupils, should be taught by manual methods.

The objection so often urged against separate oral instruction, that of the increased expense, has not proven with us at all formidable. It has been found, by actual experiment, that the capita cost of maintaining a separate oral school under the same management is but slightly greater than that of the parent school. But, however this may be, when the importance of speech to a deaf person is considered, the slightly increased outlay incurred in providing it should have but little weight. When a deaf child is able to make itself understood by its voice, even though unable to read the lips, its affliction is very greatly diminished, and no one will deny that it is our duty to lighten the misfortune of deafness in every possible way.

We consider our departure no longer within the domain of experiment; it has become an accomplished fact. The two systems are working harmoniously, side by side, each contributing not a little to the success of the other, and separate oral and manual instruction will, in future, be a prominent feature of the system pursued in the Pennsylvania Institution for the Deaf and Dumb.

THE CHAIRMAN: The next paper is "The Combined System of Instruction," by Dr. I. L. Peet, of New York:

THE COMBINED SYSTEM OF EDUCATION, AS PRACTICED IN THE NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE DEAF AND DUMB.

Combination is the condition in which we find everything in nature. The elements are so seldom found in an uncombined state, that rarely can one of them be released except by effecting a new combination. Air, water, earth, soil, ores, rocks, present familiar instances of this chemical fact. Animal and vegetable life, rising a step or many steps higher, introducing the principle of the transmutation of inorganic into organic matter, exhibit yet more remarkable phenomena belonging to the domain of chemical affinity, while the great laws of heat, of pressure, of attraction, of repulsion, and of electrical action illustrate the influence which every particle of matter exercises upon every other particle, from the minute atoms which so far escape human observation, even though aided by the magnifying powers of the microscope, as to be recognizable only by the imagination, to those stellar worlds which, revolving about some central sun, form systems upon systems, which, in their turn, and observing due relations to each other, revolve in the immensity of space around some common center, which may be the throne of God.

It is in accordance with the general law thus manifested, of unity in complexity, that analysis, the resolution of a whole into its parts, and of greater parts into smaller parts, becomes so important to him who, by right of discovery or of full comprehension, would lead the minds of children and youth from those simple elements he has brought within their grasp, step by step, through that synthetic, reconstructive, inductive process which enables them to reach the

heights to which he would lead them, and, from every level gained, bring them back, by a process of deduction, to the elements from which they started, enlarging the area at each descent by increasing the number of details, and elevating it at each ascent. It may be compared to that method of drawing which, beginning with simple lines, unites them in a general outline, and then, proceeding to give the effects of light and shade, ends in giving a projection so perfect as to produce upon the retina of the eye the same impression as that produced by the object counterfeited; or to that method of printing which, at each impression, introduces a new color, until, as a result, we have a picture glowing with blended and harmonious tints; or to those methods of manufacture which require repeated application of different tools, one after the other, to produce, in the highest degree, the effect sought.

It is such a process that forms my ideal of what is called the combined system of educating the congenitally deaf; not a system which practices, in the same institution, methods differing so fundamentally that they ought, from the nature of things, to be separated from each other and used in separated schools, but a system which brings, for the benefit of each pupil, so far as is applicable to his case, every known method which has been found useful in giving him a knowledge of written and spoken language, and of those facts, ideas, processes, and principles which constitute what is called a good common school education.

What has been called the American system of deaf-mute instruction was based upon the methods of the Abbé Sicard, the disciple and successor of De L'Epee, which were introduced into this country by the illustrious Thomas Hopkins Gallaudet, L.L.D., aided by that remarkable living deaf-mute exponent of Sicard's system, Laurent Clerc.

To Sicard are we indebted for the idea of grammatical analysis by means of symbols, which, starting from him and enlarged by Vaïsse and Barnard at New York, has reached a fuller, more complete, and more practical stage under the labors of subsequent American instructors. To him, also, is due the first successful attempt to classify signs and to describe them upon paper.

His dictionary of signs gave a correct analysis of abstract terms, but made the system which he advocated difficult to carry out. He believed largely in the value of making signs in the order of words, and was, in a high degree, formal and didactic in his methods. But he was a man of genius, and, for a time, the highest authority on deaf mute education.

The early American instructors, however, following the lead of Bébien in France, early emancipated themselves from the trammels thrown about them by Sicard, and advocated largely the use of ideographic signs with which ideas were expressed in the natural pictorial order which uneducated deaf-mutes most easily understood, and giving, therefor, English equivalents in phrases and clauses.

Associated with this development was a printed course of instruction by Dr. H. P. Peet, then President of the New York institution.

Following him, but differing from him, came Jacobs, of Kentucky, who advocated Sicard's early ideas of signs in the order of words, and wrote a text-book to illustrate his theory.

All this while, the controversies of the day, on this side of the water, hinged entirely on the method of using signs.

The report of Hon. Horace Mann, Superintendent of Public Instruction in the State of Massachusetts, on his return from an extensive educational tour of Europe, in which he gave such glowing accounts of the extraordinary success alleged to have been attained in Germany in teaching the congenitally deaf to speak and to read on the lips—accounts which led many to believe that all differences between the congenitally hearing and the congenitally deaf had been removed by a wonderful system of instruction, made it necessary that the American institutions should investigate the matter from the standpoint of the expert, and, accordingly, in the year 1844, the American Asylum at Hartford and the Institution for the Instruction of the Deaf and Dumb in New York, sent, as delegates to visit the schools in Europe, the one, Lewis Weld, its Principal, and the other, Prof. George E. Day, a fine German scholar who had, for many years, been one of its corps of teachers. Professor Day, sixteen years later, visited Europe again, and examined the schools in Holland and the Netherlands.

The reports of these gentlemen, though absolutely independent of each other, concurred in the opinion, that, while there was no advantage whatever in the system of instruction that obtained in Germany, where it had been established by Heincke, the cotemporary of De L'Epee, so far as development of mind, extent of knowledge, and the acquisition of language were concerned, over the French system as modified and improved in America, but rather, a positive disadvantage, and, while appreciable success in articulation and lip reading were limited to the comparatively few, there were cases of semi-mute and semi-deaf pupils in every institution whose intercourse with society would be promoted if they should be taught articulation and reading on the lips. Accordingly, in both the asylum at Hartford and the institution in New York, a part of each day was set aside for training certain pupils in what was considered a desirable accomplishment—that of acquiring accurate speech and some ability to read the lips.

In 1851 my father, the late Dr. H. P. Peet, accompanied by myself and three deaf mutes, who were able to bear their own expenses and wished to avail themselves of this opportunity to travel, spent about six months in a tour of France, Italy, and Switzerland, the towns on the Rhine, Holland, Belgium, and Great Britain and Ireland, visiting all the institutions that came in his way. Dr. Peet's report contained a very full exhibit of the methods employed and the results obtained in these several institutions, and is to be regarded as a standard historical statement of the condition of deaf-mute instruction at that time in the countries visited.

The conclusions he reached did not lead him to alter the course of instruction pursued in the New York institution, as he was convinced that the American system had the prestige of superiority, both in its language of signs and in its method of overcoming the difficulties of language. Of the remarkable revolution in methods in Italy and France, which, within the last few years, has banished the use of signs from countries in which that language seemed almost indigenous, and the departure from the principles of De L'Epee, Sicard, and Pendola, had not then been given the slightest premonition.

In the year 1865, a devoted, intelligent, and highly cultivated lady, encouraged by Horace Mann and Dr. Samuel G. Howe, opened, at Chelmsford, Massachusetts, a school for teaching deaf-mutes on the

principles they had each recommended, namely, the non-use of signs and of the manual alphabet, and the restriction of the instruction of the deaf and dumb to the use of articulation and writing. The establishment, in 1867, of the Clarke institution, at Northampton, Massachusetts, which had been endowed by the will of the late John Clarke, brought Miss Rogers into a broader field of usefulness, and articulation and lip reading in this country were raised to a higher degree of prominence in the education of the deaf. A conference of Principals, held there in 1880, introduced to the notice of our profession a charming school, beautiful in situation, happy and restful in its management, fascinating in its arrangements. It was in term time, so that the process of instruction could be examined. The pupils appeared to advantage, and the faith of some in the manual system was weakened by the success possible to one that was its opposite.

In the year 1866 came from Vienna, in Austria, Bernard Engelsmann, for years a disciple and assistant of the distinguished Mr. Deutsch, and established a school in the City of New York in which articulation was made the means of communication and instruction. A society was formed for its maintenance, and eventually, in 1870, secured from the Legislature of New York a law granting to it, under the title of "The Institution for the Improved Instruction of Deaf Mutes," the same privileges that had heretofore been granted exclusively to the New York Institution for the Instruction of the Deaf and Dumb, viz.: the selection of pupils between the ages of six and twelve by the Supervisors of the counties, to be supported at the expense of the counties, and of youth over the age of twelve and under the age of twenty-five by the Superintendent of Public Instruction, whose education, at fixed pro rata, should be paid for quarterly on the warrant of the Comptroller. This was at first \$300 per annum, which is the highest limit established by the law, but of late years has been \$250.

Just before this law was passed, the Principal, Mr. Bernard Engelsmann, resigned his position and was immediately engaged by the New York institution. Two large rooms and an assistant teacher were assigned to him, and under his care were placed about forty pupils, some technically called semi-deaf, because they possessed a partial hearing, some technically called semi-mutes, because they had learned to speak before becoming deaf, and others because, in the previous instruction given in the institution, they had shown a peculiar quickness of eye and mind which had given them some ability to articulate and to read the lips. Singular to relate, Mr. F. A. Rising, one of the instructors in the old New York institution, who had paid but little attention to the subject of articulation, was elected Principal of the institution which Mr. Engelsmann had founded and left, and it was under his administration that the institution was admitted to State support. Mr. Rising was subsequently succeeded by Mr. D. Greenberger, an expert in teaching by articulation. Mr. Engelsmann remained with us four years, till September 1, 1873, and until the last three years a distinct department of articulation and lip reading has been maintained in the institution.

In the year 1880 we determined to have all the pupils in the separate primary department in the Mansion House at Washington Heights, and in the branch institution at Tarrytown, taught articulation and lip reading, and accordingly two teachers, Miss Anna B. Garrett and Miss Elizabeth Mitchell, were appointed for that special

purpose. This was the method pursued in some of the schools in Europe, especially in Holland and Belgium, which Dr. E. M. Gallaudet visited in 1868, in the course of a tour in Europe, in which he made a fresh comparison between the different methods pursued upon the Continent, and which, in his able and exhaustive report, he commended, under the name, then new, now adopted as distinctive in all the American institutions, of the combined system.

Of the fifty-three public schools in the United States mentioned in the January number of the "Annals" for 1886, the method of instruction of twenty-nine is described as combined, of ten is described as manual, of seven is described as oral, of three is described as oral and combined, of two is described as oral and manual, of one is described as combined and aural, and of one is not characterized.

Of the above, the only one known to me as having a combined system in one establishment, and a pure oral system in another establishment, from which the use of signs is entirely excluded, is the Pennsylvania institution, in Philadelphia, which is working out, for the benefit of the American schools, a most interesting problem.

In this convention, our obligations are due to each and every institution which has brought here something distinctive for the common good, and which, in the sense in which Dr. Gallaudet originally used the term, has given to the convention which unites in one body, in mutual respect and appreciation, all the instructors of the deaf on this continent, the broad catholic claim to be considered as an important phase of the combined system.

In the State of New York, there are now seven institutions, in which, on the first of December last, there were present, under instruction, one thousand two hundred and ninety-nine pupils, who, with the exception of three or four from other States, all received their maintenance from the treasuries of the State and counties. Of these seven institutions, the system of one is given as pure oral, of one as oral and combined, and of five as combined.

The system of the oldest and largest of these, that which I represent, differs in toto from any exclusive system, such, for instance, as rejects either the sign language used in its natural order, signs for individual words used in the English order, the manual alphabet, the use of speech, and of lip reading, aural development, the so called natural method of learning language, the grammatical presentation of the relation of words in sentences, or any of them. On the contrary, it seeks to combine the benefits to be derived from any or all of these in the case, not of selected pupils, but of each and every pupil.

Except in what we call our kindergarten department, the hours of instruction for each class are four daily. The first hour is devoted to the recitation of the lesson conned in the study hours out of school; the second hour, to exercises in the English language; the third hour, to arithmetic, and the fourth hour, to lip reading and its corollary articulation.

The desks are arranged on three sides of the room, so that the pupils may sit behind them, or in front of them—behind them when they are obliged to use pen and ink; in front of them, in seats arranged in the form of a semicircle or semiellipse, when they are to receive direct instruction from their teacher. The wall on the side of the room in front of them, on the teacher's side, like the wall in front of you as you sit here, is lined with large slates. In the recitation of the lesson during the first hour, the teacher gives to the class a question

with the manual alphabet. One of the pupils, designated by lot, goes to the teacher's slate and writes the question. If he omits a word or makes any mistake, another pupil advances and corrects it. The first pupil then gives a sign for each word in the question. He then gives the whole question in ideographic signs, such as the pupils are accustomed to use in conversation among themselves. He then proceeds to answer the question in writing, while the other pupils watch him narrowly to see if they can detect an error. When he has finished his answer and his errors have been corrected by one or more of his fellow-pupils, he gives the answer by signs in the same manner as he has given the question. He then, if he is able, repeats his answer by articulate speech. The teacher then takes the opportunity to elucidate the matter either in signs or in language, as may seem best under the circumstances. The next pupil in order writes, explains, and answers the next question in the same manner; and so on, till the lesson is concluded, a record being made of the success of each pupil.

In the exercises in language during the second hour, there is considerable variety within each week or month. Sometimes the pupil is required to translate a story from ideographic signs given by his teacher or by one of his classmates. Sometimes he analyzes a sentence by means of grammatical symbols, giving especial attention to the phrases and clauses; the teacher requiring several of the pupils to rewrite the same sentence by placing the adverbial phrases or clauses at different points, indicated by him. Sometimes the exercise consists of conversation, the teacher writing a different question to the pupils in turn, and requiring each to give a written answer in the presence of the class, or requiring each of them to propose to him a written question, which he answers in writing.

In arithmetic, the teacher explains by demonstration the principle to be applied. He then calls upon each of the pupils to perform an example of this principle in the presence of his fellows, and to be so explicit in his explanation of his work as to make the exercise one of benefit to the whole class. He then directs the pupils to take the textbook which he is following to their study-room and solve for themselves, as an out-of-school exercise, the problems therein given.

In the formal instruction in lip reading, each teacher uses a reader of different grade, according to the standing of the class: Monroe's First and Second Readers being first used, and afterwards the second, third, and fourth volumes of the series of readers known as Sargent's Part Two. This reader he retains in his own hands, the pupils not being permitted to have access to it. He begins the lesson by going rapidly through the phonic alphabet, which consists of the different consonant and vowel sounds which enter into the pronunciation of English words, and as he does so, each pupil gives the corresponding letter of the manual alphabet, modified so as to secure an exact correspondence, as follows:

p-b-m-f-v: t-d-n-l-r-s-z-th-th: sh-zh-tsh=ch-dgh=j, h; k-g-ng-ks and gz=x-koo=qu-

ē, ĭ, ā, ĕ, ä; ōō, ōō, ō, ä, a, ō; ŭ; äē, äōō, aē, ēōō.

The teacher then dictates, by speech, the words composing one of the sentences in the book, and at each articulation the pupils give, on the hand, the corresponding letter of the manual alphabet. When a

word has been once pronounced, the teacher repeats it again and again, each time with greater rapidity, till the eyes of the pupils are accustomed to the quick succession of articulations required in its enunciation.

One of the pupils then goes to the slate and writes the word in phonetic spelling. Each word in the sentence is thus given by the teacher and written by the pupils in succession, until the whole sentence appears upon the slate. The pupils are then required, in succession, to put the orthographic spelling under each word. They are enabled to do this by a few simple rules with regard to equivalents previously given them, but when they are unable to do this the word to be translated is passed over till the close of the exercise, when its true spelling is revealed by the context. When the rules already given are not sufficient for the transformation from the one kind of spelling to the other, the teacher takes the opportunity, at the end of the exercise, to give a new rule or to note an exception so that these may be available thereafter.

When the sentence has been fully and correctly written, it is translated into signs by one of the pupils, the phrases and clauses are noticed, and attention is called to idioms. The exercise thus becomes a valuable lesson in language as well as in lip reading. I will give an illustration, by writing a sentence first in the phonetic and afterward in the orthographic spelling, so as to give a clearer idea of the process detailed:

Ē oō oō il bē glād tōō lŭrn thăt h oō ěn oō ē rĕtshed Săk rā mĕn to,
 You will be glad to learn that when we reached Sacramento,
 oō ē oō ŭr mĕt bā ē Mĭs-tŭr Oō il kĭn sŏn h oō grĕtĕd ũs oō ĭth en-thoō
 we were met by Mr. Wilkinson who greeted us with enthu-
 zĭ āzm.
 siasm.

The arrangement of clauses may be thus illustrated. The adverbial clause, *When we reached Sacramento*, may be inserted in different places, so as to produce the following variations of the sentence, "When we reached Sacramento, we were met by Mr. Wilkinson:"

1. We, *when we reached Sacramento*, were met by Mr. Wilkinson.
2. We were, *when we reached Sacramento*, met by Mr. Wilkinson.
3. We were met, *when we reached Sacramento*, by Mr. Wilkinson.
4. We were met by Mr. Wilkinson, *when we reached Sacramento*.

It must be acknowledged that this process is very slow, but it is, also, very sure. The principle upon which it is founded is that speech is nothing but phonetic spelling, which can be demonstrated *pari passu* by means of the manual alphabet. All the pupils above the grade of idiocy are able to master it, and the exercise awakens every one of them to enthusiasm. The phonic alphabet is mastered, not by continual repetition, but by use in speech, and it is a remarkable fact that, after a fair ability to read the lips has been attained, many pupils of themselves begin to articulate, by placing their organs of speech in the positions daily given them by the teacher, and often follow him as he pronounces the words.

The progress in lip reading thus rendered certain in slow speech, becomes more and more rapid from day to day, so that less and less time is consumed by the exercise, and they are able to read words spoken with comparative quickness. Two little semi-mute boys in our primary department have reached a point where they can read on the lips almost everything that is said to them at the ordinary rate of speech, and when they hesitate at an unusual word, they never fail to catch it when repeated once in slow speech, and the same can be said of others of our semi-mute pupils, while the congenitally deaf are already approaching a point, where, with many of them, it will soon be possible, as it will eventually be with all, to make communications with the phonic instead of the manual alphabet.

The method of teaching lip reading by means of giving all the pupils such familiarity with the phonic alphabet, as to enable them to read words at sight, has been practiced in the New York institution since the fall of 1882, the syllabic method having obtained up to that time. But the present method of having the lesson given simultaneously throughout the school, and of making the teacher of the class, instead of a special teacher of articulation, directly responsible, has been adopted only during the last two years, while the plan of making the lesson in lip reading a lesson in language in connection with a graded course of reading, has been perfected only during the last ten months.

The results already gained are such as to promise absolute success in the future. Our semi-mute teachers are fast becoming expert in the teaching of lip reading.

They, as well as our congenitally deaf teachers, are, however, assisted during the lip reading hour by hearing young ladies of whom we have a number who are learning all phases of our combined system, with a view to qualify themselves to fill vacancies when they occur in our own or other institutions.

It will, I hope, be understood that we do not intend to discard a single one of the various important methods hitherto adopted, but, while retaining all we have gained in the past, press forward in the future, our motto being, "These ought ye to have done and not to leave the other undone," and we are not without hope that the compliment we pay the pure oral system may be eventually reciprocated so that the fusion that is going on in all elements of progress in this great country will eventuate in bringing all teachers of the deaf to acknowledge the advantage to be derived from the combined system.

THE CHAIRMAN: The next paper is "Comprehensive Education in its Philosophy and Practice," by Mr. Gilbert O. Fay, of Hartford, Connecticut.

COMPREHENSIVE EDUCATION IN ITS PHILOSOPHY AND PRACTICE.

In hearing education, teachers discuss topics before their pupils or require them to read up the same in text-books, and later to reproduce the remembered substance in language, written or oral, generally the latter. Facility of speech, an extensive diction, exists at the outset. A deaf child is not best taught by the same verbal process, destitute as he is, or nearly so, of both words and thoughts. Such a task is the Egyptian one of making bricks without straw. The wiser teacher, with true philosophy, will become for the time a gesticulating mute himself. The mute's pantomime he does not shun or seek to

extirpate. He is thankful for its existence, and patiently learns to use it, that thereby he may lead the pupil up to the added understanding and use of words in their easiest visible form—the dactylic, or finger spelled. He becomes a child himself, even a mute, that thereby he may lead his pupils up to and into their kingdom of heaven—written and oral speech. The pupil, encouraged by the fellowship of his teacher, will work along this new line of language patiently, happily, hopefully, successfully. Not a single pupil will despair or fail. The script of the school-room and the type of the book will follow in close alliance. The fingers, in decimal system, will count and calculate; and their equivalents, numerical and verbal, will be committed to memory. Within a year, the pupil will write many a story with his stock of words, already amounting to five or six hundred. The same process, kept up, will conduct him subsequently through the various uses of the vocabulary of common life and the usual list of studies constituting the course. Printed language or script, previously written, will be the preferred medium of communication to the pupil in the school-room. Extempore pictures, pantomime, differing in no philosophic sense from the pictures of books, will be freely furnished in explanation of the verbal text. When neither print nor prepared script is accessible, dactylic language will be employed. But out of the school-room, in the tide of daily life, in its flood of events, great and small, in its business, its amusements, its necessities, its exigencies, verbal speech will yield precedence to the more rapid and more expressive language of signs. Spontaneous feeling will maintain itself against all precepts of teachers and their severest repressive discipline, be it sweeping or petty.

The child's first learning of language will be a process of simple imitation. Later, when ideas have increased and the reasoning faculties have measurably awakened, sentence analysis and rules of composition will be profitably introduced. No teacher, however, should forget that a wide vocabulary, scanty enough at the best, with simple syntax, very simple, is preferable to longer sentences of misused words. Much should be, may be, understandingly read that should not be at any time imitated. The wide understanding and flowing facility of teachers, and the analogy of composition by hearing pupils, often mislead the teacher of the deaf into a pace and range of work entirely beyond the assimilating capacity of his pupils. The right use of qualifiers and idioms is slowly, very slowly, acquired. Verbal language is incessantly lapsing. Haste will break up a growing style, really correct, into a chaos of shreds and patches.

For deaf children at this stage there is no adequate literature existing for the occupation of their leisure hours. So called children's books, though beautifully illustrated, are decidedly too difficult verbally for deaf-mutes. To some exceptional pupils, already referred to, the editorials of the daily press and the fictions of Dickens are acceptable. But the ordinary deaf-mute needs at first books and papers upon the commonest topics, written wholly in simple sentences of eight or ten words. Such a literature is indispensable as a substitute and equivalent for the colloquial speech of the hearing. The want of it is the occasion of many idle, or worse than idle, hours among the deaf.

Following the acquisition of verbal language in its simpler and clearly visible forms of finger spelling, writing, and print, the comprehensive teacher will also undertake, along the years, as a part of

the general course, and with daily drill, to give to his pupils a mastery of the vocal equivalents of the words which they already understand and freely use. The task is beset with extraordinary difficulties, and should not be pushed at one time to the weariness or disgust of the pupil. Not hearing his own voice or the voice of others, and only conscious of certain muscular action approved by his teacher, his difficulties are prodigious. Gains trifling to the hearing should be thankfully recognized and encouraged. Every deaf child can learn a few words. Many can learn to pronounce sentences fluently. With advancing education, pupils judiciously handled will have a growing ambition to add oral speech to written. Poor articulation, broken speech, is better than none. The ability to utter single words, to go no farther, adds substantial value to life. To make room for oral speech, the range of study in general knowledge and written language, already limited, need not, should not, be narrowed. Vocal training should be introduced into, or rather added to, the course of existing education in fair proportion; and it should occupy a part of the daily school time, presumably, of every pupil. A degree of proficiency in oral speech should be made a condition of graduation in the State institutions and in the National College. To secure this result, extension of time, if demanded, should be granted.

The deaf, out of school hours, should be encouraged to use dactylic and oral speech, not passing beyond the point of weariness. If they are likely to become proficient in oral speech, steady encouragement and its superior convenience will secure its permanent use. After they have acquired the correct use of dactylic speech, they should not be held permanently to its use. If unlikely to rise to the easy use of oral speech, they should not be checked in their inclination to think in pantomime. Its celerity, parallel in degree to oral speech, affords them, in thinking at least, a great relief from the tardy pace of finger spelling, be it ever so rapid and correct.

Errors of proportion have divided the educators of the deaf into schools of opinion, not exactly hostile, but certainly separate and narrow. The schools of France, for a century, and subsequently the schools of the United States, while theoretically favorable to the teaching of articulation, have demonstrated only and mainly, through long practice, the importance and possibilities of pantomime and the uses of the manual alphabet, supplemented by written speech. They have applied these instruments with great skill and energy, and have produced a remarkable body of silent scholars, easily superior in scholarship to anything that oralists have been able to produce. French and American schools, true to their traditions, have been backward, however, in taking up and applying, with equal skill and energy, the teaching of oral speech. Might not a fraction of their silent written scholarships have been well exchanged for a degree of oral skill? Such seems to be their own present conviction. We are now witnessing the introduction of the systematic teaching of articulation into all the prominent institutions of Europe and America. And the pursuance of this policy has exhibited the fact that the development of the faculties and the acquisition of verbal speech by pantomime, by finger spelling, and by books, are an excellent preliminary training, the full peer of all rival expedients, for teaching associated and subsequent oral speech itself. The pupil has something to say, and can be more easily taught to say it. The present

need of our historic schools is to expand their scope still more widely, so as to include and attach to themselves all that is valuable in oral schools. If a longer school period shall be found necessary for the best results, it should not, will not, be withheld.

Another school of opinion, represented by the schools of Germany, for a century, and by a few recently opened in the United States, ignores the pantomime of the deaf, and uses none. It omits the finger alphabet, and proposes to teach the deaf at the start, and with no intermediate step, oral speech itself, and by it all branches of desirable knowledge. Though opposed to the use of extempore sign pictures, it uses all printed pictures freely. It omits evidently and rejects such illustrations as the pupil is likely to imitate and to incorporate into signs of his own. It is communicating instruction with great and increasing skill, and to a proportion of pupils steadily enlarging. The partially deaf and those who have heard in early years succeed from the start. An additional number, some of them totally deaf from birth, succeed to a limited extent, practically useful. A large number do not acquire it sufficiently to be able to rely upon it, singularly evanescent, in after life. At school they habitually invent and illicitly use a gesture language for social relief, and feel more confidence in their pencil than in their voice. The time spent in oral teaching has crowded out some topics taught in the sign schools. The range of written scholarship, including English composition and the ability to read newspapers, is considerably lower. This deficiency is justified by those who are responsible for it by the compensating value of the oral speech, acquired or attempted.

These schools have yet to learn that, in omitting the use of pantomime and finger spelling, they ignore the uneducated mute's best friend. They take away a ladder, the only ladder known, by which all the deaf can easily rise. They require the mute, scorning all climbing steps and gradual approaches, to clear at one bound the chasm that separates the deaf from the hearing. They force the recruit at once upon frowning breastworks. They apply a method derived from the functions of the hearing mind, and not at all from the essential, the universal functions of the mind of the deaf. Attempting the best things for all the deaf by a method heroic, they succeed with a small number, less than half, and, holding no middle ground, substantially, culpably fail with a considerable number. The brilliancy of the operation is clouded by its frequently fatal issue.

These schools, excellent, ambitious, and ably officered, need, in behalf of many of their pupils, to incorporate into the early years of their course all that is valuable in the sign schools. The removal of intervening barriers will make the two jarring methods friends—astonished to remember that they ever differed. Pantomime and finger spelling, as jealously excluded now from oral schools as the "long keels of the Northmen," will prove a boon, a help, and not a hindrance to all their pupils. They will all easily rise, and rapidly, to the plane of written speech; and those capable of taking the higher step, the last, the crowning oral one, will not be the less able for having a broader elementary base.

To secure the best results in existing institutions, sign and oral, a degree of reorganization will be necessary, gradual or summary. It will involve in sign schools the adding of the teaching of articulation to the daily round of the duties of existing teachers, or the employment of additional articulation teachers. In oral schools it will

involve the added use of pantomime and the manual alphabet by existing teachers, or the employment of additional teachers who can use them. New institutions need not be embarrassed by servile imitation of institutions time honored simply. The line of progress is not necessarily a royal line, a dynasty. Errors may be transmitted, congenitally so. New institutions should have the enterprise and courage to select and to combine wisely, with at least one eye to the future. A great desideratum in the equipment of a school so enlarged is a collection of books, a library of them, composed in shortest words and in syntax extremely simple, with the syllabification and all silent letters clearly indicated.

It remains for our country, reverential and fearless, inventive and aspiring, and abounding in resources of money and of brain, to organize, to perfect, and to sustain, an eclectic, a combined, an American system of deaf-mute education—a system that shall be true to the nature of the deaf, and that, using all arts, shall conduct them gently, hopefully, happily, and within a reasonable time, up to the plane of oral speech. Some will talk in halting tones. Some will pause midway at written speech, and that in syntax poorly ordered. But all will, by graduated process, achieve results proportionate directly to their school time and to their receptive power.

THE CHAIRMAN: The subject is now before the convention for discussion.

MR. NOYES: I would like to ask a few questions in reference to this subject, which, perhaps, more particularly refer to Mr. Crouter's paper. I desire to ask Mr. Crouter if he, in receiving pupils into his institution, first introduced them into the oral department?

MR. CROUTER: No, sir.

MR. NOYES: How do you know who are suitable subjects for the oral classes?

MR. CROUTER: They are all received into the institution. There is but one institution, and they become pupils of it. Those who are semi-mute or semi-deaf are sent to the oral department. Then there are some bright deaf pupils come to us that I think possibly may be taught in that way, and they are also sent to the oral department at once. At least, we did that last year.

MR. NOYES: Are you always able, during the first week after their admission, to determine who are proper subjects for the oral classes?

MR. CROUTER: Not in cases of congenital mutes.

MR. NOYES: Did you ever discover, after years of trial in a sign class, that the pupil, almost of a sudden, developed an ability to speak?

MR. CROUTER: I presume there are such cases.

MR. NOYES: Can you suggest to this convention some method by which the Superintendent or Principal can be quite sure of determining those who are proper subjects for the oral classes? Suppose we have thirty pupils admitted at the opening of the term. Within the first ten days of that term, how can we be sure that we have obtained for the oral classes all those that ought to be in there?

MR. CROUTER: In the case of those who are congenitally deaf, there is but one way in which the matter could be finally decided, and that would be by giving them all oral instruction.

MR. NOYES: Your theory is that all should be put under an oral teacher, and be kept there?

MR. CROUTER: No, sir; I made no such statement.

MR. NOYES: That this hourly drill in articulation was worthless?

MR. CROUTER: Yes, sir; I think so. I think that the half-hour drill, in cases where deafness is congenital, is almost useless.

MR. NOYES: How can you determine?

MR. CROUTER: From the results of our past experience. Take a boy who comes in the institution for the first time, the only way in which the matter could be decided would be to try him with oral instruction.

MR. NOYES: That is your method, then—half oral and half manual instruction?

MR. CROUTER: No, sir. I should give him oral instruction, and have done with it. Not both oral and manual. I should put him into the class of oral instruction.

Last fall we received into our institution some sixty pupils, I think. There was a large oral class, composed wholly of congenital mutes, in the main institution, under the instruction of Miss Richards, who can give an account of her work. Those were all new pupils.

I will say further, that before selecting these pupils for Miss Richards, the best of those who were congenitally deaf were sent to the oral branch, and Miss Richards' class was made up of those who remained. There were two classes, of some twenty pupils, sent to the oral branch; first a class of semi-deaf and semi-mutes, and then a class of congenital mutes; the latter class consisting of those who were particularly bright, coming from intelligent families, young and more hopeful cases; they were sent down, and of those who remained some ten were selected and placed under Miss Richards' instruction. All of the rest, consisting of a number who were congenitally deaf, and too old to begin oral work, they were placed under a sign teacher alone.

MR. NOYES: I want the principle by which you make this selection, to determine who are proper subjects for sign classes.

MR. CROUTER: The ones that were placed under sign instruction, a class of sixteen pupils, were all pupils that were past twelve years of age, and I did not think it was advisable to place such children under oral instruction. It would be an experiment which I did not care to make.

MR. NOYES: My own theory has been that taking pupils and training them for half an hour a day, in a short time you can determine who are proper subjects for articulation, and who are not. But I have yet to meet the Superintendent or teacher who can take a glance at thirty green, uncultivated, and unsophisticated pupils, and can select, right off, those who belong to the sign class and those who belong to the oral class. I have had pupils who at the end of the second year, when I thought they were not competent for articulation, sometimes suddenly become subjects for the oral classes.

MR. CROUTER: I do not think there will be any question about the advisability of attempting to instruct orally the children born deaf mutes, who come to us at the age of sixteen. I think there would be no serious attempt made in our oral schools to instruct a boy or girl born deaf, who comes to school at sixteen. It would be a useless waste of time. There is but one way in which that question can be answered, and that would be, to give all children upon entering our institutions oral instructions; and then when you are satisfied that it is a failure give them sign instruction.

MR. NOYES: I suppose that all children when they enter our schools

ought to be sifted; and during that sifting we determine who ought to be put into the sign classes and who into the oral classes. And that can be done by simply introducing all of the children into the oral classes and giving them a test; and then, when dissecting these oral classes, determining who can be properly continued in oral work. And this is a question I would like to have come before us; whether it is the proper way, to introduce every child into the oral department first, and retain him there until we are satisfied. When I had charge of blind children in our school, we almost invariably held to the principle that all of the blind children should learn music. Some of our boys I verily believe could not grind an organ with any taste, and they had to give it up. They had no tune; and we took them from the department, sometimes after two or three years trial. In regard to deaf and dumb institutions, shall we put all of these children, whether five or twenty years old, into the oral department, and then simply sift out those who belong in the sign department, after we have had a fair and satisfactory trial? This is a question I would like very much to hear discussed.

DR. GALLAUDET: I have listened with great interest to the question just asked by Professor Noyes, of Minnesota, as I have also to the papers presented this afternoon. It seems to me that in the grand movement of deaf-mute education in America we have made history rapidly to-day. I do not remember to have read, nor to have heard in any convention or conference which it has been my privilege to attend, thoughts expressed which seemed to me to mean more in the interest of the widest and best teaching of the deaf, than those which have been presented to this convention this afternoon in the able papers which have been read. It is with no little pleasure, Mr. President, that I see strengthening indications of a certain harmony and spirit that is ready and willing to adopt what is good, and equally ready and willing to reject what is found to be less valuable. And I see, Mr. President, in the sentiments of these papers a prophecy, voiced by him whom hereafter I shall look upon in a sense as the prophet of deaf-mute instruction in this country, my friend Dr. Fay, of Hartford, who, with keen and far-looking ken has grasped what is to come in the future. And I congratulate him, while I equally congratulate my friend, Professor Crouter, on his presentation of practical work done in Philadelphia, and my old friend, Dr. Peet, on his philosophical presentation on the general subject of the combination which is to bring out in the future such grand results. I look to Dr. Fay as our prophet for the future. [Applause.] And, Mr. President, he has given voice to thoughts that have rested in my mind during these days that we have been together here, which I have not time to formulate, and which I should not have put in shape with the precision, strength, and vigor that he has been able to express them. But when he says that the day is coming when, in the oral schools, signs will be used, and the manual alphabet will be used, and there will be teachers, either those who now teach orally who will learn signs and the manual alphabet, or others who will come in to help them, I congratulate him on his prophetic vision, for it is a dream in which I have indulged, but which I have hardly dared to express. But, Mr. President, I will venture, now that my friend Dr. Fay has gone forward in the van, to follow him, and say that I believe that no teacher of the deaf, whether a teacher in an oral school or not,

is fully equipped for his or her work until he or she is proficient in the language of signs and in the use of the manual alphabet.

I am not expressing this idea on the spur of the moment, or wholly at the suggestion of Dr. Fay. For in the school at Washington, which forms a part of the Columbia Institution, which embraces the College and the School, we have a teacher of articulation who was for a number of years a teacher of the old or the sign method. And I have watched for six or seven years the work of this teacher, who has been devoting all of her time to the teaching of speech and lip reading to the deaf; and I am certain that on occasions—I may say almost without number—I have seen her take the hand of her pupils, or the tongue and lips of her pupils, and carry them lightly over difficulties in speech, because she knew how to reach them by signs. [Great applause.]

I am speaking from experience. I have seen results among the pupils of our Kendall Green School, with regard to which I have no disposition to indulge in that American weakness of boasting—I have seen pupils there attain results under the instruction of this teacher, who was an adept in the sign language and ready and nimble in the finger alphabet, that has astonished me. Up to the present time we are teaching articulation practically as an accomplishment. I mean to say that the pupils of our different classes have gone out of their classes for half an hour or more to the instruction of our articulation teacher. I have seen results obtained among our pupils, even among congenital mutes, which I venture to say, in all humility, will compare favorably with some of the results that would be called above the average in purely oral schools where the pupil has teaching all of the time.

I commend most earnestly to the serious consideration of those of our friends who are present here, the second of Dr. Fay's suggestions, that the teacher of the deaf, no matter what is his or her province, ought to know the language of signs. I will linger for a moment on this point, to give a reason or two why I make this recommendation. No one knows more certainly than the teachers of the oral schools themselves, that deaf children will use a language of signs. They will use it on occasion. They do resort to it; they do fall back upon it, no matter how much attempt is made to distract them from the use of language of signs. Therefore, it seems to me, for this reason if for no other, that the teachers in these schools should be adepts in the sign language; not merely able to use natural gestures and pantomime, to illustrate what is said in the school-room, but to know all of the language that their pupils know. And it is a fact, I believe, in many oral schools, that pupils go in and out and use a language which is, to a certain extent, not possessed by their parents or teachers. I have been told that they can successfully impose on their teachers, who know nothing of it.

I will take no longer time to discuss this point to urge oral teachers to learn the sign language. As great an oral teacher as Graham Bell has told me within a year that he wished he knew the sign language; and he has promised to come to me and learn. [Applause.] So I have the highest authority for urging oral teachers to learn the sign language.

Mr. President, when I arose I had in mind many more suggestions, especially one in the direction of a question asked by Mr. Noyes as to how it is to be determined who is to be taught speech in our

schools. I am prepared to cover that point and one other by a preamble and a couple of resolutions. It is rather unusual for us to adopt resolutions in this convention. Thought and discussion here are free, and we have rarely attempted to bind any one by resolutions. And we do not attempt to bind closely the opinions of any one. But I offer this preamble and resolution in the interest of a sentiment; but it is a sentiment which I think it is worth while to cultivate and strengthen by all the efforts in our power in this country. For it is a matter of great delight to me, as years have gone by, and as convention after convention has been held, that we have been able to bring together in this body of American instructors of the deaf, men and women who have at times held opinions almost violently opposed to each other; those who have been sometimes urging methods and pressing measures that were antagonistic and almost hostile; and it is the glory of this organization that we have worked now for twenty years nearly, since our canvassing the association in 1868, with a harmony of purpose and with a friendliness of spirit that challenges the admiration of the nations of the world. I believe that that very sentiment is worthy of cultivation; for I see in its prevalence alone, when that sentiment is held to and allowed finally to prevail, that the prophecy of my friend Dr. Fay can be fulfilled. If we are antagonistic to each other—at sword points—all of the time holding up the merits of rival methods, we reach little good. We bring forward our methods; they differ, and great independence of thought and opinion is allowed. We hear what our friends have to say, and they hear what we have to say; and we go home with the seeds which they have sown in our minds, which will bear fruit in the future. And so we go forward in the work which I feel to be a grand and noble work with a grand and noble spirit. And so I have ventured to formulate an expression of opinion which I think this convention certainly, if I have any appreciation of the sentiment of its members, even those who differ as to method, will be able to unanimously subscribe to. I think it will be a sort of covenant, if they do subscribe to it, each to the other, of mutual respect to those who have their different opinions, and to the desire to give and receive at all points where it is possible.

WHEREAS, The experience of many years in the instruction of the deaf has plainly shown that among the members of this class of persons great differences exist in mental and physical conditions, and in capacity for improvement, making results easily possible in certain cases which are practically and sometimes actually unattainable in others, these differences suggesting widely different treatment with different individuals; it is, therefore,

Resolved, That the system of instruction existing at present in America commends itself to the world, for the reason that its tendency is to include all known methods and expedients which have been found to be of value in the education of the deaf, while it allows diversity and independence of action, and works at the same time harmoniously, aiming at the attainment of an object common to all.

Resolved, That earnest and persistent endeavors should be made in every school for the deaf to teach every pupil to speak and read from the lips, and that such efforts should be abandoned only when it is plainly evident that the measure of success attained does not justify the necessary amount of labor.

I trust that these resolutions may be adopted by the convention without dissent. I should be glad to have them discussed, and any suggestions made with reference to them that may seem proper to the members of the convention. I offer this preamble and these resolutions for consideration at the present time.

THE CHAIRMAN: The resolutions are before the convention. Is there a second?

MR. ELMENDORF: I expected to be able to second these resolutions most heartily; and I can second the second resolution most heartily, with the proviso that these children who are given to articulation teachers for trial should be given to articulation teachers who are trained for the work, and not to novices, before saying it is a failure.

DR. GALLAUDET: I accept the proviso.

MR. ELMENDORF: Because in my short experience as a teacher I have not only known such things to be done, but I feel it my duty as an advocate of the articulation method exclusively to put that proviso in. With that proviso I heartily second the motion.

MR. GILLESPIE, of Nebraska: I am in favor of the resolutions, and will offer an amendment to the second resolution: that a general test be made, and that those who are found to have sufficient hearing to distinguish sounds, shall be taught aurally.

DR. GALLAUDET: I will also accept that.

The resolution was then put to vote, and carried unanimously.

REV. DR. THOMAS GALLAUDET: I always rise with diffidence among the practical educators, because I have been so long out of the details of the school-room. We have had this subject up in various ways. I simply arise to repeat what has already been said; that, in the first place, those who hear and speak know that the sound of the human voice is, perhaps, the most effective instrument by which we produce that inner thrill on which we build up the subsequent education of the child. How much more significant are the ideas of a letter coming from one whose voice we know. The voice comes to us as we read the words of the letter from some distant friend; and it is that remembrance of the voice which brings to the eye, perhaps, the unbidden tear, or swells the emotions of the heart. The orator who knows how to mold his voice, is one who knows how to sway the heart, the mind, and conscience of his listeners. Where is the substitute for the sound of the human voice? The motion of the lips is a very feeble substitute. Spelling out the English words and sentences is all very well as practice, but it is a feeble substitute; and so is writing out one's thoughts on the slate. I appeal to my semi-mute friends, if they cannot answer this question; if they do not know in the innermost recesses of their soul, that they need this language of motion; that they need these signs, thrown out with the expression of the countenance as those who hear me speak and throw out these sounds. We do not spell the words, and we do not think how they look. We throw out sounds, one after another, in common conversation that touch the inner life. And I believe, from my own experience from my earliest childhood, that we need this language of motion—another language. It is not the English language, and has no connection with it. Those of us who have used it for years, know that we do not speak the English language when we are addressing deaf-mutes. We are trying to throw a flood of light into their minds; therefore I make this simple plea, that persons may think of it, and see where the substitute is for the sound of the human voice, if it is not in the judicious use of this instrument, which we call our sign language. [Applause.]

MR. GILLESPIE, of Nebraska, here took the chair.

DR. GILLET, of Illinois: Mr. Chairman and ladies and gentlemen, I have no lengthy remarks to make at this time. I think the reso-

lutions that have been adopted pretty fairly express my views upon this general subject. I am apprehensive that many of us may not attach all the importance to even an imperfect articulation and an imperfect power of lip reading that it deserves.

We have not made any Daniel Websters in speech or any Jennie Linds in music among our pupils, either in the oral institutions or in the sign institutions of this country. But I have seen enough of even a very limited amount of articulation and lip reading in the seventeen years that I have been in the Illinois institution to know that it is of very great value, and ought not by any means to be neglected or ignored.

The first paper read to us this afternoon was one that very greatly interested me and brought back to my mind some of my earliest experiences when we first embarked in the endeavor to teach the deaf to use articulation and to acquire the art of lip reading. I went over pretty much all of the ground in a practical experience that Professor Crouter has described as the scheme that he has laid down for himself and for the Philadelphia institution during the next few years. It was what seemed to me eminently reasonable and natural. But yet I found as I advanced in it, and as Professor Crouter will find as he advances in it, as a matter of practical work, difficulties that had not been anticipated. The scheme works well for a year and it may work well for two years; but I call Professor Crouter to take notice this afternoon that when he comes to carry out that scheme four or five years, when he finds that he has an institution within an institution, a classification within a classification; that he will find practical difficulties that it will be almost impossible for him to successfully overcome.

This matter of classification is not by any means to be ignored. It is one of those practical points that gives strength and efficiency to an institution. And the more your classification is perfected the more effective and efficient will be the work that you will succeed in carrying out among your pupils. Anything that tends to break up that classification, or anything that tends to prevent reclassification as circumstances make it necessary, is to be avoided. The classification can be modified all of the time. You may have a perfect classification to-day in your school, and next week you will have a different one. You cannot take five hundred, or one hundred, or fifty, or twenty youths and keep them exactly together in the same grade of improvement, and move them along evenly for one week. Your classification will be modified every day. And the wise Superintendent will, as far as it is possible for him to do, in view of other circumstances, from time to time modify his classification. Thus only can he best effect the work to be brought about.

And now, Mr. Chairman, on this general subject before us this afternoon, we should be very careful not to fix our minds, and especially not to fix our hearts, upon anything, as that we are determined to carry out. Why, this profession of teaching the deaf and dumb is but in its infancy. The very children of the father of it in this country are still with us. The men and women are present here on this floor, who remember to have made in real life the acquaintance of that noble benefactor, Thomas Hopkins Gallaudet, who first brought it to this country. We are only planting the seeds, only laying that foundation. And it is eminently wise that we so plant these seeds that the fruit shall be of that character that shall be best for those

that follow us, and that the foundation shall be laid so that those who come after us may improve on what we have done.

I stand here to-day and feel proud to believe that we have advanced in a good degree upon what the fathers gave us; and I am bound to say in this presence, that when I come to consider all the discussions, and all the controversies, and all the new methods proposed here and there, in Europe and America, for the betterment of the methods of instruction that we pursue, I am bound to say in candor and truth that I feel more and more the wisdom of the fathers in the methods that they brought to us, and that have become more and more in vogue among us.

And now I am glad that upon this Pacific slope we find such a cosmopolitan gathering as is here to-day. There was one interested in an institution for the deaf and dumb who only a few days ago came to us from across the broad Pacific; there is another here who only a few weeks ago came to us from across the broad Atlantic; and here we are from all parts of this great country of ours. And as we come from the mountain and the prairie, from the hillside and the plain, all bent on one purpose and seeking one aim, so we come all ready to surrender anything that we may be shown to be defective, and glad to take hold of anything that may promise good. [Applause.]

Now, Mr. Chairman, it is not to be denied that there are some deaf-mutes who can be taught to speak; and I wish here to say, in the fear of God, that he is not a friend of the deaf-mute who throws anything in his way that will prevent his acquiring speech or the art of lip reading. [Applause.] And that finds a hearty response in the heart of every individual here present. Let us bring them as rapidly as we can to approximate as nearly as possible to the plane upon which we ourselves find ourselves, and to restore them as quickly as possible and as nearly as possible to the normal condition of men and women.

MR. CLARK, of Arkansas: I agree very fully with what Professor Noyes has said; that he did not see how any man can take sixty deaf-mutes and tell which ones to put in the articulation class, and which to put in the sign class. When I began in Arkansas last fall, I was confronted with just about sixty deaf-mutes, of whose power of speech and use of articulation I was absolutely ignorant, as I was of everything else in that institution, our articulation teacher having resigned within two or three days of the beginning of the term. But I had a very good teacher of articulation, and in consultation with him, we decided that the best plan was to make a test with every pupil in that institution of their capacity to receive instruction in articulation, and, at the same time, of their hearing. And it was not such a tremendous job. There were a great many of them that in five minutes you could tell that they should go into the articulation class, or should not. We did test them. Some of them went to the articulation class every day for a month, others for two months, and some for three or four months, and some of them were taken out at the beginning of the review work in the other classes, and I think there are still one or two whom I will take out next fall. Our institution now numbers eighty-nine, and every one of that number has had more or less teaching in articulation, until, in my own mind, I was perfectly satisfied either that that child could not be taught articulation to a practicable extent, or, that it was worth while to make the experiment. We have now about thirty who go to the articulation regularly. How it could be managed in a small institution, without much funds, and

where we could not have as many articulation teachers as we need, I cannot say. And the whole time that Professor Crouter was expressing his views, that one question: how did he cull them out? was running through my mind. I cannot see how it is done. I do not yet understand it.

DR. GALLAUDET: I would like to recite an incident, relating to one of the pupils in our school in Washington, which may throw some light upon the question of how to determine which pupils should be taught to speak. I have in mind a young man who has within a few weeks passed an examination to enter the college. He has been a pupil for a number of years in the Kendall Green school. He was taught four or five years in the manual method before we introduced the teaching in articulation some seven years ago. When we began teaching articulation, he was one of the earliest pupils taught. His sight was defective, one eye being turned, and he was not a very vigorous boy physically. His teacher labored with him for two years, and at the end of two years it seemed to me almost certain that he could never succeed in speech. But he was an interesting boy in many respects, and he was intelligent; and his teacher, who was very earnest in trying to succeed in every possible case, asked to be allowed to teach him still longer. He was continued another year, and his improvement the third year was more marked. During that year it was discovered, much to our surprise, that he had enough hearing to be trained. And so the oral method was begun with this boy; and the fourth year his progress in speech and lip reading, with the assistance of what hearing he had, was something very remarkable. And to-day he is no longer a deaf-mute. I may say that he is absolutely restored to society. He uses the ear trumpet with as much readiness as many of the deaf gentlemen here, and hears what is said to him through the ear trumpet, and speaks with great precision and clearness, reads from the lips with greater quickness than some pupils of oral schools, and stands to-day as one of the highest triumphs of the art. Yet, at the end of two years the scale barely turned in the balance whether he should not be given up as one with whom articulation and lip reading should be tried. So I say to all teachers, do not be in a hurry to give up pupils who seem not to be able to speak.

MR. CLARK, of Arkansas: I should like to ask Professor Gallaudet, if you had tested that boy during the two years aurally, as well as orally, don't you think you would have turned the scale sooner? We did that, also, in Arkansas.

DR. GALLAUDET: Quite possibly; but it was not suspected that he had hearing enough to be of any service to him. The new light of aural instruction had not radiated to us from Omaha. [Applause.]

MR. ELMENDORF: In this connection, I would like to answer Professor Noyes, as an articulation teacher, that we take them all. I would like to say to him, that I consider it impossible to make the selection as he says. In our school we have nothing but the articulation or oral method; and there are many times, particularly this year, where children have seemed to be entirely too stupid to improve by articulation. After one month or six weeks, or three or four or five months, the most of you would perhaps have given up. But the teacher who has charge of this little class that came to us at the age of six or seven, and some very much younger, has the patience of Job, and more, too, and never gives up. That teacher is Miss Moffatt, of our institution. She at one time told me, in conversation: "I do

believe that if a few of the sign teachers who think that we use discretion in choosing our pupils would come and look at my class, they would be satisfied to the contrary." There are from twelve to sixteen in her class, and during the very last month of the school there were six who were promoted to the next class above, whom I, myself, had given up as entirely hopeless. And that is the way it is with them all. There is a moment that comes when they seem to wake up. And no one has the right to take away the chance of that awakening. And to try it for a week, or six weeks, and then to say they cannot learn articulation, is, I think, impossible.

MR. NOYES: I would like to add that my experience is perfectly in accord with Professor Elmendorf's. I recall to mind one little boy from whom during the first year it was almost impossible to get a sound that we could get hold of as an indication that he had ability to speak, yet to-day he is a fair articulator. His voice is weak, but his intonations are clear and distinct. If we are going to begin at the beginning of the first year, we have got to go over the same ground the second and third year before we can be sure we have thoroughly sifted the matter and got those who are proper subjects for the oral department.

I presume that almost all of the teachers here have heard the history of Teresa Dudley, the daughter of Hon. Mr. Dudley. You remember that she was taught two or three years in the American Asylum, at Hartford, where she acquired a very fair knowledge of language; but that she had not obtained a knowledge of oral speech at that time. But I firmly believe that the training and cultivation of mind, the command of language that she had when she left the sign school, had so awakened her that she was just in a condition to take hold of oral speech and make the advancement which she did; and that the training which she had previously had, fitted her for the higher and nobler experiment of oral speech, and that through that and the faithful training she had she attained the degree of articulation she now possesses.

I use this as an argument to show that we should try not only once or twice, but again and again to see whether there is an ability and power to read the lips.

MR. WILLIAMS: It seems to me that it is impossible to determine at once who are and who are not fit subjects for articulation. In our schools we have two skillful teachers of articulation; and all the new pupils are put into their hands and kept there until we are satisfied they will or that they will not succeed, and that it can never be of any practical use to them.

Our experience of last year has led me to believe that we sometimes make a mistake even then. There was a boy who came to us four years ago; and he was, after a test, found to be, as we thought, an unsuitable subject for articulation. He was rather a dull boy at that time, and there seemed very little hope of any success in that line. He remained in school a year or two; was then out for two years, and came back and was in school another year. At the end of that time he began to ask to be taught articulation; began to try to speak some words. We then tried him again and found that his mind was waked up through the instruction that he had received in the sign language; and that the boy showed some aptness and some ability to succeed. We took him up and gave him special instruction, in order not to break into the class at that time; and during this year he has had

individual instruction for fifteen minutes a day only, but he has progressed so rapidly that I think that next year he will be able to go on with the rest of his class who have had articulation for three years.

We find this difficulty also; that oftentimes when pupils are first taken up they seem to show great aptness in articulation; will learn the elements and the symbols and combinations, but when you go a step further and begin the more complicated combinations; begin to put words into sentences, some of them will fail utterly, and we cannot get them out of that condition. And so it seems to me that the only way in which we can decide ultimately who are to succeed and who not, is to continue the experiment for some time, and after an interval to repeat the experiment.

MR. CROUTER: I desire to ask Professor Elmendorf whether in his institution he meets with any failures in the teaching of articulation?

MR. ELMENDORF: During the four years I have been there I have had two cases of failure. One of those cases was frightfully cross-eyed and near sighted; the other was slightly idiotic. The father of the one who was slightly idiotic was one of the Directors of the school, and would not have his child taught privately, but insisted upon his being in the school. That boy came to the school some time before I went there. When he left the school—Mr. Greenberger, the Principal, insisting upon it at last—he could not talk or speak, except to make his own mother, and father, brother, and sister, and personal friends understand.

The other boy had a very fair education, and spoke very distinctly, but with a powerful voice. It seemed to be impossible to make him understand that he was talking too loud. He is understood very well by his own friends at home, and is now in business with his father and doing very nicely. I consider those failures. The parents seem to be satisfied with them.

MR. CROUTER: In the changes I refer to, made from our oral branch to the main institution, the test has been continued for three or four years. It was not a month's or six weeks test, but a test for three or four years; after which we thought we would try the sign method.

In regard to the difficulties of classification referred to by Mr. Gillett; as yet we have not met them, and I do not apprehend that we shall meet them. I believe it to be perfectly possible to carry on our oral school with an attendance of one hundred pupils or more, and keep up a perfect classification in both schools.

MR. NOYES: Do you have two divisions in the same class?

MR. CROUTER: In the most of our classes we do not have.

MR. ELY: In the Maryland school we take all the children that come, no matter what capacity, put them under articulation teachers, and give them a year's faithful trial, and we do not drop any one until the end of that year. Then, of course, only those that we are satisfied from this experiment of a year will not profit by oral instruction, are taken out of the oral class.

I desire, also, to say, in reference to the idea suggested in the paper by Professor Crouter, that the communications of the pupils by signs in the oral classes with the other pupils on the playground and out of school, that probably will not interfere with their speech, that that is in harmony with my ideas. In one of my published reports, two or three years ago, I expressed the idea that instruction by means of signs, the manual alphabet, and all of the means employed to reach the minds of the deaf and develop them, are of great assistance when

we begin instruction in speech. Subsequent experience has confirmed me in that idea. I believe that the first thing to be done in instruction in speech is to reach the mind of the child, and set it to thinking. Having done that, and having done it effectually, as we do by the means which we employ in the early months, the first year of teaching is the very best preparation for commencing the instruction of speech. I believe it is a very important help.

MR. KNIGHT, of Oregon: I am here simply as a learner—as the Superintendent of a young and small institution—and I wish to ask the wise men of the east a question. The difficulty with us, when we come to the question of oral teaching, as we often do, with the small number we have, how shall we do it? My Trustees make the objection that they have not the funds to employ a separate teacher. We have heard a great deal about combinations, and Herbert Spencer says: "Life is a combination of heterogeneous changes." And among the heterogeneous opinions of the past, or through them, or the influence of them, we seem to be coming to some harmony. Shall we ever have a perfect combined system until we have both systems understood by every teacher? Would it be best for me, as a Superintendent, to try to employ a teacher who understands both methods? and would it be possible for that teacher to meet the difficulties of the case, teaching both classes of pupils, considering the fact that we are unable to introduce the oral method separately? Is there any school in the country where such teachers are educated; or is there any tendency in this direction? If you take the suggestion of Professor Gallaudet, of Washington, and these oral teachers perfect themselves in the sign method, it seems to me that before long we will have a settlement of this problem. Would it not be a good policy to look to the idea, finally, of every teacher of the deaf and dumb understanding, not only the sign and manual methods, but the oral method also? In the meantime, my question is this: What shall we do in small institutions, where we are not able to have the combined method, for the reason that we are not able to employ a sufficient number of teachers? How shall we combine the methods in one?

THE CHAIRMAN: I will call upon Dr. Peet to answer that question.

DR. PEET: A hearing child hears a great deal of language before he is able to pronounce a single word. Speech is the result of hearing. So I think that successful articulation on the part of a congenital deaf-mute should always be preceded by lip reading. I do not like the voice of a great many of the congenital deaf. Many of them, as we have discovered in our examinations of late years, can hear sufficiently to modulate their voices. Some of them have spoken before they became deaf. But you take a totally congenital deaf-mute and his voice is not agreeable. It therefore seems to me that it is of comparative little importance whether you succeed in such cases in teaching them articulation. But I do think that it is of the greatest importance that you should teach them lip reading; then every person with whom they come in contact can communicate with them directly. They can get the language floating around in the world. Then they are given what is almost equivalent to hearing. I have no hesitation in saying from my experience that lip reading is much more easily taught than articulation; that it is more important; that it is the foundation of articulation, and that if we will expend our strength in that direction we shall accomplish more than we have ever accomplished before. I think it is a great deal better

to make our advances in that direction. The moment a deaf-mute is able to read the lips of other persons he will endeavor to imitate them; and he will endeavor to speak; will make greater and greater efforts, which will be crowned with greater success.

MR. ELMENDORF, of New York: I should like to state here that that is the articulation method. They must learn to read lips before they can get speech.

I will state in answer to Mr. Crouter's question as to what I mean by failure or success as follows: Last year, in the highest class in school, there were five boys, and three of those boys found positions; I going with two of them, the other one went alone. He said he thought he could get a position. I was very much pleased and surprised to receive a letter from Mr. Anderson, an engraver in New York, stating that he had engaged a boy that was a deaf-mute; and that he came from our institution, and referred to me; that he was the first deaf-mute that he had ever spoken to without any trouble, and that it was the first deaf-mute he had ever heard speak intelligibly. He had been in our school ten years. That is what I call perfect success.

Speaking from my own experience, about sixty per cent only of the pupils which I have seen have done nearly as well as that. There are some who cannot converse with strangers, as there are some here who cannot understand the signs of others, just in the same way as I have heard it stated. There is something different in the signs here and there. There is always something different in the lips of different persons. Some people do not talk distinctly. Some people shut their teeth; others have imperfect mouths. Some people mouth too much to deaf mutes; a great many teachers do, and that is a great hindrance. But about sixty per cent of all those that I have seen I consider their training successful. There are but few that, looking at it from my standpoint, I consider failures. Will you tell me any normal hearing school in this wide world that can show any better average of success than that?

THE CHAIRMAN: I now have the honor of introducing to you a gentleman from Sweden, an instructor of the deaf and dumb, who I think you will be glad to hear from—Oscar Krutmeyer.

MR. OSCAR KRUTMEYER: From the great interest in the education of the deaf and dumb as well as the blind, I am sure that the delegates here now congregated will allow me to describe the oldest and largest institute in Scandinavia.

In the year 1809, Mr. Pehr Aron Borg commenced, under a great many obstacles (as all deaf-mutes in those days were considered the same as idiots). He, so far as his private means would allow, established an institute close to Stockholm, Sweden, which was named Manilla, where he for a number of years gave instructions to the deaf-mutes by signs, and to the blind by relief printing, adopted by himself, which methods to this day are the same practiced. But it was soon shown that there were more of these unfortunates than could be accommodated in his school, and that it had to be enlarged, when it became a State institute. Mr. P. A. Borg was chosen to be one of its Directors and its Principal.

During the time that the school was Mr. Borg's private concern, he used for to show—contrary to the common belief that these our unfortunate fellow-beings could not be taught anything—that a Supreme Being had made some remedy therefor, to take his pupils and travel

several hundred miles over the country to show what he had accomplished. His name spread with rapidity all over Europe; and he had not been working long in this noble cause before he was called by the King of Portugal to Lisbon, to lay a foundation for an institute there.

During the latter part of his life he was aided by his son, Mr. Ossian Edmund Borg, who at that time was studying medicine at the University, and who, after the death of his father (1839), became Principal, in which position he continued to 1874, when he retired. During that time he, on a large scale, reorganized that institution, and was to a great extent the cause of establishing several of the small ones now in existence in that country.

Mr. O. E. Borg, a Freemason of high standing, has been decorated a Knight of the Royal Wasa Order, Swedish; Royal Dannebrog Order, Danish, and Imperial St. Anne Order, Russian, besides being made an honorary member of the Deaf Mutes Societies in Paris, Berlin, Copenhagen, etc.

In memory of his father, his countrymen have, by contribution, placed his bust (bronze on a granite pedestal) in front of the institute, and have besides contributed a large sum of money by which, from the interest thereof, several poor deaf and dumb children are kept at that institute.

Mr. O. E. Borg has a son and a daughter employed as teachers.

Manilla is also a seminary for both sexes. The teaching of the deaf-mutes is both by sign and by speaking, and is divided into three classes. Each class has one male and one lady teacher, and twenty-five to thirty pupils. Besides those three classes, there is also one confirmation or graduating class.

STUDIES—*The deaf mutes* of both sexes are taught religion, history, geography, arithmetic, natural history, writing, drawing, accounting, and letter writing.

LABOR—For the male sex: Tailoring, shoemaking, carpentering, printing, bookbinding, and blacksmithing.

For the other sex: Sewing (both by hand and machine), cooking, washing, and ironing; all deaf-mutes, besides, in gardening.

For the blind—Religion, history, geography, natural history, arithmetic, astronomy, mathematics, writing, and music.

LABOR—Basket-making of straw and rattan, knitting, and crochet.

The course is from the fifteenth of August to Christmas, and from January fifteenth to one of the first days of June, when there is a public examination.

The teaching at the school comprises thirty hours a week, and for the labor fifteen or twenty hours. There are also taught gymnastics and swimming.

During the time I was at Manilla (1864 to 1868) there were about two hundred deaf-mutes and eighty blind pupils, but according to my latest information there were last year only one hundred and thirty-five deaf-mutes and fifty-eight blind, which comes therefrom that they are now divided on the smaller schools in different parts of the country, which together contain about one thousand pupils.

THE CHAIRMAN: I had the pleasure of conversing with Rev. Dr. Wines, of Illinois, a member of this convention, upon a visit he made to an institution for the deaf and dumb at Stockholm, and he spoke of it in the highest terms. I think it is a great pleasure to have this gentleman with us. Dr. Wines sent to me for distribution here, spec-

imen copies of a paper which he has just commenced to publish, entitled, "National Record of Corrections and Charities." He proposes to make that paper of very great value, and I can heartily commend it to all members of the convention.

Before I left home, one of the young ladies of our school wanted to know if she might write a letter to the convention. I told her I thought the members would listen to it, and if you will kindly accord with my quasi promise, I will ask the Secretary to read the letter of this young lady.

The Secretary then read the following letter, signed "Georgia Elliott," which was received with applause:

Kind Superintendents and Teachers:

I ask the dear privilege of calling your attention to the young deaf and dumb ladies, who in all these years have seemed to be forgotten, while great attention is given to the higher education of the deaf and dumb gentlemen. Look at the excellent National Deaf Mute College, and its door which is always flung wide open to welcome the gentlemen, but not the ladies. I am deaf, but not dumb, and my great desire is to obtain a still higher education, as many others of the young girls of the United States do. I have been attending school regularly at the noble institution of Illinois for the past few years, which has given me such fine advantages. From the primary grades I have been pushing steadily forward until now, having nearly completed the course, I am not content with my achievements, for I have but tasted of the fount—beyond lies the ocean of knowledge. Girls and boys are educated together in all common schools, in several colleges, and in all the institutions; why should they not be educated in the national colleges? Girls have in all schools as high a rank as boys; indeed, they generally rank higher in their studies than boys do. Thus, it is evident that they would improve their advantages at the college as well as the boys.

Girls need a higher education as much as boys. Their influence upon society as women, as mothers, as sisters, is very great, and a thorough education will better fit them for all their duties. They exert the greatest influence on the active men that do the business of the world, and can use their strength for good or ill, as they like. As the civilization of any country advances, the scholars begin to inquire what the causes are that make it advance, and one of the greatest helps to improvement of every kind, has been learned and good women. They have the first years of all lives in their care, and can mold and direct them as they will. Among hearing persons, great attention is given to the higher education of women. Look at the many excellent academies, seminaries, and colleges: Wellesley, Nassar, Smith, Mt. Holyoke, and a host of others. Look, too, at the opportunities given them by Harvard, Columbia, Amherst, Michigan, and other colleges, for the pursuit of advanced studies. Is it not a reproach to our educators of the deaf and dumb, that in all these years they have provided no college for the deaf young women?

The majority of teachers in our institution are women, many of them deaf and dumb. How much better fitted they would be for such positions if they could go through a collegiate course. The girls of to-day are to be the women of to-morrow; and the country does well that looks after the education of its girls.

What would the additional expense be to the United States Government when compared with the great benefits to the pupils? Could a few thousand dollars be spent to any better advantage?

GEORGIA ELLIOTT.

The following resolution by PROF. A. E. FAY was adopted unanimously:

Resolved, That Mr. Wilkinson be requested, in behalf of the convention, to thank President and Mrs. Homer B. Sprague for their courteous invitation to visit Mills Seminary, and to express our regret that the pressure of the business of the convention will render it impossible for us to avail ourselves of the invitation.

PROFESSOR WILKINSON here proposed the names of certain honorary members.

Here the convention adjourned until two o'clock P. M. to-morrow.

NIGHT SESSION—NORMAL SECTION.

THE CHAIRMAN: The subject for discussion to-night is "The Sign Language," to be led by Dr. I. L. Peet.

DR. PEET: I regard this section as perhaps of greater importance than any other—that is, in regard to method of teaching. Every person naturally selects the method that seems to him best, and it is not absolutely essential that all teachers should teach the same subject in the same way; but it is very important that when we have a language which is to be used by all the deaf mutes in the country, where they are constantly interchanging residences, where they are meeting each other, where they wish to communicate with each other frequently, and when, as is so often the case, a teacher of deaf mutes visits other institutions, that they should teach the same. It seems to me of very great importance that this language should not only be perfected, but that it should be made uniform. And this seems to be a very favorable occasion for laying down some of those principles upon which we can probably all agree—to bring together by way of comparisons the signs for particular ideas and words as used in different institutions.

I would say by way of preface of the few remarks that I propose to make upon the subject, that the sign language as we have it in this country was originally brought from France. There is a little French letter, which is a French word, which is used in all sorts of sense in the French language, and is also used in all sorts of sense in the sign language. I allude to the little word, and the little letter, "*il y a*." We say "stay there" [showing by signs]. It is one of those little internal evidences of the origin of the sign language as having come from France. A little initial sign given a word that is used universally. This sign language the early teachers learned from Mr. Clerc, and Dr. Gallaudet brought him over to this country as a living exponent of the sign language. I remember Mr. Clerc very well; a fine, portly man, clear in his gesture and wonderful in his expression. And the early teachers of the deaf and dumb all learned the language of signs in Hartford from Mr. Clerc, and also from Dr. Gallaudet. This language of signs is perpetual only as it is founded on correct principles. The language of signs which Mr. Clerc brought to this country was essentially a pictorial language. The deaf mute thinks in pictures; always has before him the picture of something. His whole memory is a panorama which passes before the vision of his mind, and every thought takes a pictorial shape. Put two deaf mutes together and in a very short time they are making pictures in the air to each other, so as to represent these pictorial thoughts. And this is the genius of the sign language. We do not begin at the last of a sentence and make signs backwards until we get to the beginning. We make signs in precisely the same order that the artist puts his pencil upon paper. The line that the artist draws first is that first drawn by the sign-maker, and one is just as much an artist as the other. So if you wish to ask what is the natural order of signs, I would say it is the order which is necessary in order to make a complete living picture.

In representing the sign language a man has to be, to a certain extent, an actor. If any person who is not familiar with signs will take it as the first rule that he will ignore all fear of criticism, all

dread of being laughed at, and at once get at the thing he wishes to express, he will learn to make signs very rapidly and very accurately.

One of the points in the sign language is location. As I said before, that is a part of the picture. You locate everything which you wish to express with its relations to the other things, and there you have the picture. In describing animals you represent their movements and general shape. With the elephant you represent the trunk and the tusks, and the heavy solid movement, and the moving of the trunk. With the cow you represent the horns, the general shape, and the milking of the cow. With the horse you represent his ears and mane, and his fine shape, and the straddling of the horse. That makes a full pictorial sign. Birds are made in the same way in connection with their method of flying. But such full and complete pictorial signs take up too much time for rapid communication, and our practical deaf mutes reduce these signs to the shortest space. Take the ears of the horse and ride him and you have the horse. Take the horns and milking, and you have the cow. We do not go through all of the movements which are necessary to make a complete picture; but we make a reduced or condensed picture.

The next class of signs to which I will call your attention are the metaphorical signs. If we wish to make a sign for obstinate we make the ears of an ass or mule, and the obstinate position. I remember very well that on one occasion Mr. Gamage, seated at the teacher's table, said that on one point he was absolutely determined; that his determination amounted to obstinacy. And one of the Directors of the institution, who was visiting that day, asked the servant girl, when passing behind him, what Mr. Gamage was saying, and she replied, "He said that he was an ass." But you are all familiar with that sign. We generally make it with one hand.

I was once asked by a lady why we make the sign we do for "late." I said to her, "Can't you see that it is a little behind hand?" And that is precisely the same metaphor both in signs and in words.

Another metaphorical sign which is precisely the same thing in words and in language is the sign for "confess."

There are other signs that may be called signs of indication. You point to your feet to represent your feet. Speaking of our nose we touch the nose. We, also, refer metaphorically to signs of indication. We teach and give the sign for "red," and we touch the lips; and the sign for "black" we touch the eyebrows.

I am aware that I am not addressing those who are unfamiliar with this subject. But it seems to me that it is well for us always, however familiar with the subject we may be, to consider the different classifications of the subject, to make it easier for us to explain to others the principles of a very natural and very easily learned language, if people go to work in the right way.

The latest advances in the sign language are two points: First, in the order of signs, and second, in the order of condensed signs for special words. In regard to the order of signs: In ordinary translation between a person speaking in the sign language and the deaf-mutes, we adopt the general order of the English language; and there is always one center which expresses the whole idea of the sentence—which is the key of it; and if you represent the keynote in a sign sentence, you give what is almost an interpretation of the whole idea. But persons translating in the general order of certain words have made this singular mistake. They have given a sign for each single

word in a sentence. A phrase, a clause, a metaphor, or a metaphorical expression, composed perhaps of several words, is generally represented by a very few signs, perhaps not more than one or two. In the idioms of a language several words are brought together to express a single word or single idea, and this single word or single idea is generally translated by a single sign. When you make a sign for each word in a phrase or a clause or an idiom, you just spoil the whole thing, and take away all its life. There is no significance in it, and you create confusion in the mind of the deaf-mute. But if you take the general order of signs, the plain language, and when you come to this idiomatic expression or phrase or clause, give it in a single sign, or the one or two natural signs which express it, and which have their equivalent always in single roots, in single signs, then you are giving the sign language naturally. And that, I should say, is the secret of successful translation into signs. Seize the speaker's meaning, and then give it to the deaf-mutes in the way in which they would be most likely to understand it; and not attempt to follow out each word, especially in these metaphoric phrases and clauses. That, as I said, is one of the general improvements that has been made in the course of years. You will notice, perhaps, that, as we have convention after convention, the sign language seems to be more easily adapted to translation. It is one of the most difficult things in the world to take the thoughts of one man as he expresses them in one language, and translate it rapidly and clearly into another language. There is only one thing more difficult than translating into signs, and that is translating from signs into words. [Applause.] And the difficulty of that is that we are not half so smart as we think we are. The English language very few people understand. We all of us believe we understand the sign language better than we do the English language. It is an exceedingly difficult thing for any man to express his own thoughts in words clearly and fully. When we write we have a thought existing in our minds which we wish to bring out in so clear a manner that every one may understand it. If we extemporize we shall have an approximation to that thought. If we are writing and dash it off we shall have an approximation to our thoughts. We shall not give it fully, clearly, and perfectly. In order for any man to fully express his own thoughts he has got to make about as regular approaches as an army has to take a fortification. He gets nearer and nearer the idea by successive action, by successive sentence. Some men write in that way. They first express a part of their idea; then repeat it, and say something else and repeat it, and say something else, and get nearer and nearer their thought. That is the peculiar style of some writers. They cannot tell you the whole thing first, but they get nearer and nearer to it in successive sentences. But only those writers who have rewritten the same thing many times and made many corrections in their writings can give any thought fully and in the exact words that belong to it. This has led me to believe that the phrase, "We think in words," or "We think in signs," is all nonsense. Our thought is entirely independent of words, and entirely independent of signs. It exists as a picture in our mind, and then we go to work and try to express that thought in words.

For that reason, I think that the language of signs has been greatly abused in the minds of those who think that it is an injury to the deaf-mute to use signs instead of words. They say they think in

signs. They do not think in signs. Sometimes I think that if our pupils would think at all, it would be a great improvement. If we first have the thought, then express it in signs, and then express it in words, then we have accomplished a very great victory.

So, as I have said, one reason why it is harder for a person to translate from the deaf-mute signs, however clearly they may be related to the English language, than it is to translate from the English language into the sign language, is, that we all understand signs better, really, than we do words. The command of language which will enable a man to take the deaf-mute's clear thought and go with him from beginning to end, keeping pace with him and giving the exact idea clearly and fully in words, implies a very remarkable knowledge of the English language; and that is why it is so difficult. It is not because we do not understand the deaf-mute signs. I can sit down and listen to a deaf-mute sign maker, and follow him perfectly. But if I am called upon to put those thoughts into words, clear-cut, terse, and expressive English, I feel as if a task were imposed upon me which is greater than I want to perform at the moment.

The next advance, as I understand it, in the use of the sign language, is in uniting the manual alphabet with the natural gesture which expresses the idea. If anywhere you make a mere agreement upon a sign, and that sign does not have within it those elements which will make it acceptable; if it has not as clear a derivation from other and accepted signs as English words have from other and accepted words, the deaf-mutes will reject it. But if there is a clear reason for it; if it is directly in the line of sign etymology, it will be accepted and will be used.

In rapid talking by signs, we cannot go through the whole definition of a word when we give the word itself. And so following out the analogies, we take certain rules of sign etymology, just as we have certain rules for the etymology of words, and we get one sign or another.

I think one of the most striking signs which is founded upon the manual alphabet and upon the idea which the sign is to convey, and also even upon the Latin word from which our English word was derived, is the sign for "religion." We take the letter "r," which is a twisted cord, or rope; we put it upon the heart, and we tie the heart back to heaven. We take the letter "r," and point to heaven, and bring it down to the heart. And that is all there is of religion. It is a short, easy, and expressive sign.

The sign for "institution" has been generally diffused throughout the various institutions for the deaf and dumb. We used to speak of institution for the deaf and dumb as a building; something that is built up with a roof and with the sides down, within which the deaf and dumb go to school and have their hands feruled. [Showing.] Now we make the sign "i" with one hand which looks like the spire of an educational institution, and make this sign for institution. [Showing.] And when we talk about any kind of institution, political, charitable, or social, we make the same sign.

Another sign which is very similar, founded on the natural sign, is the sign for "instrument." You take the lever as perhaps the fundamental idea of the word instrument, just as the wheels are the fundamental idea of the sign for "to go." You take this letter "i" and use it as a lever and you have got "instrument;" and then you can talk of all kinds of instruments; a musical instrument, a legal

instrument, or a surgical instrument; anything which you pry up anything with.

Then the sign which I once brought out in my former lecture, on Initial Signs—the sign for blessing. I have always studied signs in connection with my pupils, and not with hearing persons. I want to have a deaf-mute teach me. I get half my ideas from a deaf-mute. The deaf-mute teachers in our institution meet at my house every Tuesday evening, and we study the sign language together. I generally take a passage of Scripture and read it, in order that we may be better prepared for Sabbath exercises, by signs, and they give me the sentences, the words corresponding; they spell them out as they recognize them, and if they cannot recognize the word, I say there must be something wrong in it, that you do not recognize that word. And I try it again, and get a better sign if I can, and keep on, until finally we get a sign that I am sure they understand, and they give me a corresponding word. It often happens that one of them suggests a sign which is a good deal better than mine, and I accept it.

Once when I was teaching in a high class who were studying signs together, I said to them, "What is the best sign for philosophy?" Every pupil in the class tried to give a very succinct sign for philosophy. Finally one of the girls took the letter "p," made the sign for thought, and put it under the other hand, and I recognized at once as thought plowing under the surface of things. That is philosophy. So we always speak of that as philosophy.

Supposing we have a sign for each word in the English language. Is there any more harm in using the English language in making a sign for the word, than in using the English language by writing it or by spelling it? We are not using the sign language in either case. We are using the English language when we make the signs in the order of the words, putting all of the words in. But there is this advantage, that it is shorter, clearer, and more significant. The sentence, perhaps, does not translate itself, but words do. Every word in the sentence is made clear to the mind of the deaf-mute, although the whole force of the sentence is not made clear, and they have to work that out for themselves and to choose either spelling or writing. For that reason it has always seemed to me, that the force of the argument against using signs in the order of words, if we wish to do so with intelligent deaf-mutes, or wish to converse with each other in the English language, was very much weakened.

I am not at all afraid of signs used in the order of words, although I do think that pictorial signs, or pantomime, which is the same thing, ought not to be discarded in communicating with the deaf. The great advantage of pictorial signs or pantomime is that you bring the sign before the minds of your pupil. You do not give them any hint, as to the word which they are to use. You give them a simple idea, the same kind of an idea you would give them if you showed them a picture, and then the deaf-mute seeing those signs, tries to convert them into language; in other words, to express in his own language an idea given to him, just as he would attempt to describe what he had seen.

A fine picture upon the wall is injurious to the deaf-mute, because it is not in the English language. A magnificent scene that we are passing through is injurious to the deaf-mute because it is not in the English language. Scenes which are nothing but a picture are injurious to the deaf-mute because they are not in the English language.

This all seems to me to be perfect nonsense. I accepted long ago the opinion of the elder Gallaudet, that the more ways in which you can put language, the more language in which you can express an idea, the more ways in which you get them to think the better you understand that language. The mind is stronger.

In expressing the word "fact," something done, I take the letter "f," put it down as accomplished, and cut it off. I make an assertion. It is an asserted thing; and all of these emphatic signs are alike, and you can use whatever initial letter belongs to a corresponding word.

There is a sign for "time" which we use in New York, which is different from that used in some other institutions. We take the letter "t," and make a single circle with it, to represent the word "time."

The other day it struck me that our sign for "travel" or "journey" was rather difficult, so I consulted with some of my deaf-mute assistants, and they concluded that the new sign which I suggested was better than the old one. You know we take the revolution of the earth, and a journey is a day's movement. So we not only make this general movement, but we give the idea of the revolution of the earth, which is the journey. Instead of that we travel now in an altogether different way from what we did. So I take the letter "t" for the initial of "travel," and also make the smoke-pipe of a locomotive or steamer, and we travel in that way now. [Showing.] That is a very short sign.

You all know our general sign for "nations." Dr. Gallaudet and some others take the letter "n" and indicate a little place upon the globe for the nation. Take the letter "g" and we get "Gentiles."

A great many of these signs are exceedingly natural. If you wish to discover anything you take the cover off of it. So our sign for "discover" is to make the sign for the letter "d" and point down.

Has it ever struck you why we always make the sign we do for "from?" You notice that it is the same thing that is for the letter "x," the Latin word for "from" is "ex." The word "experience" means that we fish a thing out. The other day I had the word "exorcise," and I did not know how I could make my deaf-mute audience spell the word "exorcise," in my reading of the Scripture. The magician who was going to exorcise the evil spirit put up his hand and moved it in this way. [Showing.]

With these few words, and willing to answer any questions that may be put to me, I will refrain from trespassing upon your patience longer.

MR. NOYES: It has always seemed to me that one of the great points in the sign language is that it is natural, and so emphatically so that pupils in all of our different institutions can understand the signs made, and that even foreigners who have been taught in sign schools, or in schools for the deaf, when they come here very readily understand religious services, when they are conducted in the natural signs. It seems to me that if we are going to have in the New York and Philadelphia institutions some initial letter, or some little motion of the finger which may be akin to the letter, where will our natural sign language be?

DR. PEET: I will answer your question by asking another: Suppose there is some word you cannot express by natural signs?

MR. NOYES: If I mistake not, in my early days your honored father stated in public that there was no clear, definite, and distinct

idea but what could be conveyed through the medium of the sign language.

DR. PEET: Yes, sir. But if you get a sign which is perfect in every relation that it can hold to a word, and has in itself a significance, and is very much clearer than any other sign, why should you reject it simply because it is new?

MR. NOYES: My idea would be to hold on to it if it is natural. In Minnesota, when I first went there, I had a school-room which fronted on the street, and sometimes when I was busy with my classes I would see their eyes going towards the window; and looking in that direction I would see, perhaps, half a dozen Indians, their eyes just over the closed blind, looking in. I called them in sometimes; gave them a seat to let them see our natural signs. They understood them readily. But if I undertook to use some of these initial signs, or these arbitrary signs, they would be all confused. They understood the natural signs, and took in the thought readily. And if we convey our ideas clearly in the natural signs, why not hold on to them? If this natural sign language is competent to convey to the mind of deaf children these ideas clearly, it seems to me that it is important to hold on to this general language of signs, so that we may be readily understood; and so that if a teacher passes from the New York institution to the Minnesota we shall not be all in confusion. If there is a general natural language of signs let us have it and hold on to it. For school-room purposes I admit that initial signs are very excellent, and very desirable; but I refer now to general discourse in the sign language. The object of sign language is to enable us to reach the minds of children, and convey to them ideas which they cannot understand in the English language.

To give an instance of the power of the sign language which I shall never forget: About three years ago a girl thirteen years old was being sent to me, and on her way to school for the first time she ran away from her father at the depot and started for home. Her father advertised for her, and in a few hours she was taken up on the railway track on her way home, with her shoes in her hand, where she had defied the railroad train and stopped the passengers by remaining upon the track. It took five men to put her into a buggy and shut her up in jail. They telegraphed to me asking if I had lost a crazy mute. I had never seen her. She was brought to me; and every man, and every human being, she seemed to think was against her, and she was terribly against them. The first time I went into the house to meet her I found her in the middle of the room, looking like a demon, if I ever saw one. The only articles in the room were an iron bedstead with woven wire mattress, and a trunk. She put her foot through her trunk as quick as I could put it through a straw hat. In a little while, by the use of the sign language, as she could not understand a single word or letter, I got hold of the girl and quieted her down, and she is to-day an interesting, a happy, and intelligent girl. In less than three days' time I had her quiet, and she understood me to a considerable extent, and I understood her, and there was established quite a friendly relation right away. And this was all through the medium of natural signs.

It seems to me that there is something in natural signs that we want to hold on to and keep until we can get these children lifted up into the English language, and then we do not care anything about it. If there is a genuine sign language that the Indian and the uned-

uated deaf can understand let us hold on to it. If we can improve on it, very well. But it seems to me we should seek for that which is natural and easy; which will convey easily to uncultivated minds the ideas we have in view.

MR. WESTON JENKINS: I rather deprecate this discussion of the uses and advantages of the sign language. There are many different views to be presented here, and a good many teachers who are here very probably think that the sign language is of no use in the school-room; that it is an incumbrance rather than a help. But if all the views and different opinions are brought out in a controversial way and taken down in the records of the proceedings, I fear, with the Apostle, that the world itself will not contain the books which shall be written.

MR. WALKER: I cannot agree with the last speaker. I think there is a great deal to be learned by discussing this language of signs. I am a young teacher myself, and while I agree with all who have spoken in favor of natural signs, I think there is a great deal due to the originator of these initial signs. They have been a great benefit to me and to all of us. We have unconsciously got into the use of them; and they shorten interpretations very often. They are often very handy; and I use them; and I do not believe it hurts anybody to use them ordinarily. I believe the use of natural signs and of pantomime where necessary has a beneficial effect.

As an illustration of pantomime Dr. Peet read "The seven ages of man," which was interpreted by Mr. C. W. Gamage with great applause.

THE CHAIRMAN: I think the audience would like to hear from Dr. Gallaudet, of Washington.

DR. GALLAUDET: I have listened with great interest to the remarks made in the early part of the evening; one in particular to which I will refer briefly which seems to me of very considerable importance to those who will be sign makers, especially to those who will undertake to lecture in signs; to speak to a body of deaf-mutes, children or adults, or one who will attempt to translate from speech into the language of signs. A little later on I shall have a remark to make with reference to translating from signs into speech, about which something was said a little while ago, and I will then give my reasons for so doing.

First of all, in the expression of one's ideas by signs, to speak from my own experience I would say that, dating away back to the time when I first attempted to lecture in Hartford many years ago, having prepared the notes of a lecture of an historical character, I went to my room and before a mirror delivered the lecture. I studied carefully all the signs and what series of signs would convey the ideas that I wished to convey clearly and distinctly without repetition. I do not say that I study my signs before the mirror now. Perhaps I have gotten by that. But I will say that it is my practice when I am about to go to a Sabbath school to open its exercises, and to read a passage of Scripture, it is my practice up to this present time to have the passage of Scripture before going to the chapel, to read it over carefully, and to determine in my mind how I will present this or that passage in signs. I do not give the actual words. Take for instance the expression: "Though he slay me I will yet trust him." I read that over and see in what signs, in what form of expression in signs, the ideas conveyed by those words can be conveyed most clearly and certainly

to the minds of those who may be spectators. And I think it is of great importance, when one is to speak in signs, to be sure beforehand what series of signs will best convey the idea of the speaker; and then to give those signs.

This may possibly be at variance with the custom of some who claim, perhaps, that they speak as naturally in signs, and as freely, as in speech. That may be true. But I still think that to speak clearly in the sign language requires some forethought, some reflection, and some arrangement. And the suggestion comes to me, whether it should be in accordance with the English order or not. I will say for myself that, without attempting to follow the English order closely, I do like to present my ideas in signs in an order which is not distorted and twisted from the English order; I like to follow it as nearly as I can without sacrificing grace and ease in the sign expression.

In reference to translating from speech into signs, in my own practice I have followed the rule of endeavoring there as in the other case to use those signs which will most clearly express the ideas which I wish to convey, without attempting to follow very closely either the order of words or even the order of sentences of the speaker.

During the past year I have been one Sunday in every month interpreting services in Washington City, in a church there, for a company of deaf-mutes that have been in the habit of attending. And I found at once when I began to perform that service that to give the interpretation clearly and well I should follow the speaker by an appreciable time; that is, that I should hear what he had to say, and should keep up my line of thoughts, expressed in signs at an appreciable distance behind him in point of time, that I might have an opportunity of carrying on a mental process sufficient to convert his ideas clearly into signs, without attempting to follow closely the order of his expression.

With reference to the translation of the sign language into speech, my experience has been that the difficulty which is encountered there depends very much on the way in which the sign speaker uses the sign language. It has been my experience that if the sign speaker has been clear in his utterances that it is not a matter of the greatest difficulty to translate those utterances into speech. My general experience is that it is a very difficult matter to translate the ideas of one who is speaking by signs into speech. But I think this arises in a very great degree from carelessness; sometimes from a lack of precision and absolute clearness in the signs of the speech itself. And I think that if those qualities were cultivated that the translation from sign speech into oral speech would be less difficult than we often find it to be.

I would like to say just a single word to the teachers of the deaf here, simply in reference to the efforts which ought to be made to maintain and to hold the sign language in what we may call a pure state. I mean by that to make earnest effort to have a thorough and full command of what may be termed the sign language. That, I admit, is a somewhat indefinite expression. I cannot say definitely what the sign language includes. It may include more or it may include less; but my own idea of the language of signs is, that it enables us as speakers to the deaf to convey our ideas clearly and satisfactorily, and in a manner which shall be interesting to the minds of deaf persons.

To preserve the sign language in its purity, we must depend upon

those whom we have reason to believe know it in its purity; and we must imitate them. If there is in an institution one teacher who is known to be a clear sign maker, he must be studied and deferred to by the others. The sign language can be kept in its purity only by a decided effort to use it clearly and to use it fluently. I have seen sign makers who, it seemed to me, were very careless in their signs. I have not seen any here in California since I have been here, of course, as our interpreters have all been graceful and clear in their sign making. But I have seen sign makers who seemed to be careless, and who might improve. It is a matter almost like letter writing. A sign maker can be very indistinct and imperfect; or, on the other hand, if he gives thought to what he is doing, he may express himself in signs with clearness, without repetition, and in a manner interesting and entertaining to those who see him speak.

I have in my mind now some of the masters of the sign language, as I recollect them; some of the men who are passing off the sphere of action. I remember the Rev. Mr. Turner, formerly Principal at Hartford. He used to come, in our early years, to Washington, and lecture to our students there. I remember one lecture given by him, especially—the most entertaining one at which I was ever present. He was clear, distinct, and full in all that he undertook to say. And from that time to this I have felt this power worthy of serious and earnest cultivation.

I was asked a little while ago by a deaf teacher, if a dictionary of signs could be written. I doubt it. Dictionaries of signs have been written; but as to the question, could one be written which would be very useful in translating the sign language, I shall have to answer, I doubt it. I think the language must be preserved by its being taught by one who uses it well to others who desire to use it well.

MR. HENRY WHITE, of Utah: Personally, I am as much opposed to the use of signs as any one; I am a pure oralist. Signs do not have any influence upon the mistakes of deaf-mutes. Signs sometimes help and sometimes do not help deaf-mutes. If a class could get along without signs, I would be glad not to use them. But that cannot be done. When I lost my hearing, before I went to the institution, I had made signs, but without any definite system at all. When I came to the institution, I could not have gotten ideas if the teachers had only spelled or written, but I had to get ideas through the signs. Signs are necessary to the conveying of ideas, and if you try to get along without them, you lose a great deal of time.

I have been to two schools; one where signs were made, and one where they were not—to the Hartford institution, and Horace Mann school in Boston. It is more natural for the deaf child to think in signs. Out of school they will make natural signs. They will use signs describing things that they have seen. Under the influence of teachers, who use signs, they learn to make much better and correct signs. We have had an illustration this evening, by Dr. Peet, of why he makes the sign he does for "cow;" and why he makes the motion of the horse, and the riding of the horse. I think that is very important.

I never shall forget with how much interest I received the first lesson that I ever had. I do not believe I ever had lessons in Yale College in the English language, or Greek, Latin, or German, that interested me more than the little short lessons of half an hour, that

I received the first year I was initiated into the use of the sign language.

I think the Superintendents, or whoever have the charge of initiating a new teacher, that knows nothing about the language of signs, should have them taught clearly, distinctly, and definitely in regard to these fundamental signs, and then the combination and use of them in the school-room can be made from time to time, and can be made clear, interesting, and profitable. This is also profitable as a study of language.

It has been my experience and observation that those teachers who have a clear and distinct understanding of the use of the sign language, and can use it clearly in the school or lecture-room, are the most successful teachers.

There are some gentlemen here, perhaps, connected with the Pennsylvania institution who remember Dr. Hutton, the honored Principal of that institution, and with how much care he initiated his new teachers. And I want to say in this connection that I never in my life realized the power and force of the language of Scripture in the parable of the sower, until I saw Dr. Foster one Sabbath morning use that and put it in the form of signs. I forgot that I was in the chapel, and I seemed to see the sower and see how he scattered the seed; and how the seed fell by the wayside and upon the stony places. And I have seen pupils that would watch a speaker or signer with tears in their eyes, following him as he presented these thoughts one after another. I have no hesitation in saying that there is a power in the sign language in its presentation of vivid thought, if it is rightly used, that this English language does not possess. [Applause.]

MR. ELY: I want to emphasize the point made by Dr. Gallaudet in his remarks, and also touched upon by Mr. Noyes. I agree with Mr. Noyes that the sign language is a language of remarkable power; and that in the presentation of religious truth it certainly is not second to the English language. We can reach the hearts of our listeners through the medium of the sign language oftentimes more surely, more effectively, and with greater power than we can by the use of spoken language. But the point that I was going to insist upon was this, in regard to the purity of the sign language: I have sometimes thought that this language was deteriorating. There is great danger that, if we are not on our guard, it will be corrupted; will not be kept in the purity in which it has been used in the past. There is a tendency I think among those of us who are using it to adopt and absorb into the language what may be called slang signs. There is slang in use among those who use the sign language as truly as among those who use spoken language. And many of those signs, because they express some thought, some idea, or some folly of the time in an amusing way, are gradually becoming incorporated into the sign language. And I think it is in the power of the teachers of an institution to do much to keep the language pure, as it should be. Pupils will of course invent new signs, and sometimes they invent very expressive and good ones; signs that are worthy of being incorporated into the language. But oftentimes signs come into daily use that ought to be ruled out. I think that if teachers will pull together it will do much to keep the language as it should be.

MR. FRANK: I think that the use of signs helps a great deal in the higher classes; that it saves time. Pupils may begin with natural signs, but when they have been in school longer they will use the

initial signs. I have lately caught several of these slang signs to which Professor Ely has just referred. I agree with Dr. Gallaudet that the signs should be arranged and kept systematically. I think that we should adhere to some particular signs, and that the teacher should criticise the pupils for their use of any other signs. A variety of signs confuses the deaf-mute.

Here the section adjourned until to-morrow, at nine o'clock A. M.

TUESDAY, JULY 20, 1886.

MORNING SESSION—NORMAL SECTION.

MR. ELY in the chair calls the meeting to order.

Prayer was then offered by REV. DR. GALLAUDET.

THE CHAIRMAN: The subject of this morning's session is "Instruction in Art." This section will be led by Mrs. A. J. Griffith, of Illinois.

MRS. GRIFFITH: We who are engaged in the work of this department congratulate ourselves and the class for which we labor that the time has come when art is considered so important a factor in the instruction of deaf-mutes as to be allowed a portion of the valuable time of this convention. Our object is to consider the best methods of imparting this knowledge to make it of greatest practical value. The question for the hour is, "What to do and how to do it." Our worthy Chairman suggested "experience as of more value than theory." My twelve years of teaching have been so many years of experiments, having no preconceived theories to maintain. We follow no rigid rules of instruction; as tastes and talents differ the method differs. We give elementary instruction in the different school-rooms to those pupils who have been in schools over three years, a fifteen-minute lesson once a week, consisting of lines, straight and curved, angles, squares, and a few geometric forms—teaching them the names of lines and angles—the first original design, as they advance. In this way the whole school gets the instruction in drawing, and it also affords an opportunity to find those who have a special talent for this work, who are then placed in classes occupying from one to two hours a day, so arranged as to least interfere with their school work. They study model and cast drawing in charcoal and crayon, rapid sketching from life and nature, application of design in clay modeling and wood carving, crayon portrait work, and oil and water color.

MRS. GRIFFITH (after the reading of paper): Miss Eleanor Patten, one of our pupils, will give an illustration of her mode of teaching.

MISS PATTEN (a deaf-mute speaking through an interpreter): The first step is a straight vertical line. I ask the pupils the name of that line, and teach it to them. Then I cause them to commit it to memory; have them all stand up around the large slates and draw vertical lines as nearly as possible with a ruler. At first they get it crooked, but after practice they get a neat straight line.

The second step is to make the same thing without a ruler. I have them make a great many of them for practice. I give the direction

to draw a vertical line, or so many vertical lines, without the ruler. I show them their mistakes and correct them.

The third step is to make a horizontal line, with a ruler first, and then without a ruler, following the same plan as was used with the vertical line instruction.

The next step is to teach the child how to measure by inches—one, two, three, and so forth—with the ruler. After this is learned I give them directions to draw a vertical line so many inches long, first with a ruler and then without it. After repeated corrections, they learn to draw very well without the ruler, according to the directions.

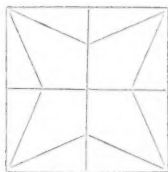
The next step is to draw a square with the ruler several times, until they can get it square with a ruler; and then to draw them without the aid of a ruler. Then they make the diameters of the square, and then the diagonals of the square, and so on. That includes the first year.

MRS. GRIFFITH: These exercises come once a week. We have a writing teacher who gives instructions in writing fifteen minutes every day in the different school-rooms, excepting Wednesday, and this work comes on Wednesday.

DR. PEET: Does all of this drawing exercise come upon one day in the week?

MRS. GRIFFITH: Yes, sir; Wednesday for the whole school. This elementary work, but fifteen minutes at a time.

MISS PATTEN: The second year they begin figures similar to this:



They make lines across the center of the diameter or square first, and then make the other lines within the square. Then I divide that up into smaller squares, putting figures into it, forming designs in the square. Finally they draw quite complicated designs the second year. I often draw in one of these small squares a pattern myself, and require the filling in of the other squares without my aid; and by and by they become so proficient that they can make these patterns themselves without a teacher.

The third year I begin curved lines; first a circle, and the diameter of the arc of a circle, and so on. And I also use curved lines in the square in the manner that I have already indicated. I require them to draw many patterns of that kind, using the curved lines, and I require them to originate them.

The fourth year I begin triangles, right angles, and so on. Then I continue that in that way until I have by that time discovered those who have peculiar talent for drawing. [Applause.]

MISS BESSIE EGGLESTON: How do you teach drawing circles and curves?

MRS. GRIFFITH: We first begin with a square, and then draw a circle in it with freehand. After this year's work we use no more measures, and no rule.

Miss Mary Peek, who assists in drawing from casts and models, will now give an illustration of her work. Miss Peek has been a pupil of ours, and is now a teacher.

[Miss Mary Peek and Theodore d'Estrella gave an example upon the board of drawing from objects, which were received with applause.]

DR. PEET: Is this slate work done in a class?

DR. GILLET: No, sir; it is done on paper; a class of fifteen or twenty at a time drawing from the same models and different points of view, and the teacher illustrates it on the blackboard.

MRS. GRIFFITH: This work we do on the blackboard with charcoal and crayon. The elementary work is all done on a slate until perhaps the last month in the year, and then we have a paper something of the size of a commercial note sheet, that we have the pupils use with a pencil, and we save these papers, and, at the end of the year, looking over them we find that some of them show talent, and the best of them are selected, and the pupil is taken into a special class.

MR. GILLESPIE: At what year do you introduce this drawing from model?

MRS. GRIFFITH: That depends on the expertness of the pupil. Right at once, if we feel that they are able to go at it. We begin with drawing a cone at first, and we keep the pupils on that until we find they are able to go on further.

DR. PEET: Is this a part of the fifteen-minute exercise?

MRS. GRIFFITH: No, sir. Miss Patten carried us as far as we go in the fifteen-minute exercise. Then, after that, they are brought up into the several classes, where we teach them from one to two hours a day; one hour, perhaps, for two or three years, unless we see that they are going to make something of it after they leave us, and then we give them two hours daily.

DR. PEET: How large a proportion do you so promote?

MRS. GRIFFITH: We take all pupils for the three years, and give them this elementary drawing, and we have about sixty pupils out of the three hundred in the special class.

MR. GILLESPIE: When do you let them commence to make pictures?

MRS. GRIFFITH: We keep them for two or three years just drawing from models and from casts. We allow them to shade in the second year of the special work—that would be the fifth year—if we feel that they can make a success of it. We are governed altogether by the apparent progress the pupils make. We have no rigid rules about it. We have the fifteen-minute exercises, for all the pupils in the school that have been there over two years, in their class-room.

For the last two years we have carried on wood engraving very successfully, and we have here some specimens of it. First, the pattern is drawn on paper, and then modeled in clay, and then carved in the wood. The frame I show you is engraved out of cedar. The face in the frame was modeled by one of our pupils, first in clay, to the sitting of one of the pupils, and is a very truthful likeness. Then it was cast in plaster. Mr. Rogers made the portrait, which I show you. Miss Gallagher had charge of that department, and she will now give us some thoughts upon the subject.

MISS GALLAGHER: Wood carving is supposed to be the oldest branch of art. Probably the first weapon was a club, and the first decoration was some carving on it. It is a branch of true art, having

for a foundation a good knowledge of drawing and an intelligent idea of modeling. It has been dignified by the diligent application and serious thought of some of the best artists the world has ever known. * * * Of the ancient carvers the Egyptians stand first. On account of this being a comparatively new branch of work among the deaf and dumb, I had written in this paper a short historical sketch of wood carving—merely to show to what an extent the art had been carried by the ancients—but the time is so limited that I will only mention one statue, which is Egyptian, that was discovered by Mariette, during his excavations at Sakkarab. It is of wood, and attributed to the early period of the old kingdom of Memphis. This is, probably, the oldest statue in existence, and is now in the museum at Boulaz. The wood used by the ancients was usually sycamore, cedar, cypress, walnut, and ebony, were often inlaid with ivory, agates, hammered silver, etc., and in South Kensington Museum are beautiful specimens of this work.

Most ethnographical collections have carvings from different countries—Greece, Germany, France, Mexico, New Zealand, Polynesia, Persia, Japan, China, Spain, and Switzerland being represented. These references are sufficient to show that this subject has been practically studied, from the reign of Menes to the present time, and we will leave these countries—ancient Greece, artistic Italy, substantial Germany, extravagant France, and industrious Switzerland—to see what the possibilities are for America in this branch of art, and more particularly what benefit it may be to the deaf and dumb in this country. We know there is a demand for it. Our handsomely furnished city houses to-day are no more complete without their carved furniture, newel posts, etc., than they would be without a piano, library, or fireplace, with brass andirons, in the hall. They are ceasing to be luxuries and growing more, each year, to be necessities.

When our country was discovered there was no demand for deaf and dumb institutions, sleeping cars, or carved tables. But soon deaf and dumb institutions were necessary and a Dr. Gallaudet was found; sleeping cars were needed and introduced. Other luxuries are fast becoming necessities, and some one will reap the benefit. Why should not the deaf and dumb have an opportunity to do it?

It has been said, "Industrial products are unlike bread, of which enough is enough." Of industrial products we want all we know of, all we have heard of, as fast as invented. Alexander the Great never craved a watch, or our great grandmother a sewing machine, because there were none; but times have changed since then, and instead of nineteen out of twenty men being farmers, as was the case a hundred years ago, the proportion of farmers has decreased as steadily as the number engaged in industrial pursuits has increased. Showing, again, "enough bread is enough."

The demand for skilled labor cannot be made more prominent, I think, than by calling attention to the manual training schools which are being established all over the country. Some may think that if all children are to be taught the use of tools that the mutes cannot compete with them. While the standard of work will be raised it is not to be supposed that many boys or girls will excel in such branches as wood carving, without more lessons than they will receive in these manual training schools; or, if they should, all we have to do is to raise the standard again. There has always been found room up higher.

Our industries are waiting for more skill, and are willing to pay for it. There is no danger of skilled labor becoming common. Skill breeds diversity of employment and originality. There are a plenty of laborers in the country, but not many skilled, intelligent ones. As Colonel Jacobson says, a boy in Ireland will grow up to shovel and dig at \$1 a day. His son, born in Toledo, will learn to read and write, and, with some mechanical skill, will earn \$2 a day. His son may go to the Toledo Manual Training School and earn afterwards his \$3 to \$5 a day. Anaxagoras spoke well when he said, "Man was the wisest of animals, because he had hands;" and Bacon when he said, "Education is the cultivation of a legitimate familiarity betwixt the mind and things."

Our mutes have the advantage of most speaking children from the start, in that they are taught *drawing*, which is the key of *all* branches of art.

Give them first a good drilling from the object *always*. Then let them begin to design. Give them what we call the *principles*. Curved lines to elaborate. Always let them be warned of over ornamentation, by seeing how nature restricts her true ornaments, the flowers, and sprinkles them sparingly contrasted with the foliage. Try also to have the design suitable to the piece of furniture to be carved. Have most of the designs conventional (for one never wearies of a well executed conventional design) bringing in the realistic as sparingly as does nature her flowers. Remember as construction implies a purpose, utility must have the precedence of decoration.

Then let the pupil have enough skill with clay to model these designs. Of course no one can model in wood, that cannot in clay, a much more bidable medium. You may draw very well a design, but the same design modeled will be much more easily comprehended. In one case you have the shadow of the substance, in the other the substance of the shadow.

In the wood carving schools in Nuremberg the students are expected to model in clay exclusively for half a year. After the drawing and modeling are mastered well enough for our purpose, take a well seasoned panel of wood, walnut, oak, cherry, mahogany, or any hard wood. Take first some simple design, say half a diamond; take your skew chisel firmly in your left hand, place it directly on your line, inclining it outwardly, so when you hammer with the mallet, which you have taken in your right hand, there will be a clean beveled edge cut. Do this on two sides of the design, place the tool obliquely on the third side, and remove the wood between the two incisions, and your design is finished. Repeat this many times till you can cut each side with one stroke, and finish with one more, and leave your edges smooth and *clean*. In no profession does cleanliness stand nearer godliness than in wood carving.

When you have mastered this and a few more simple patterns, take a more elaborate conventional design, treating it the same way. By degrees you can take up scroll and realistic designs.

If the mutes are taught this art they must understand it is work, not play; that if they make their five to six dollars a day they must do the work well. This is a progressive age, but philanthropists are not standing around on every corner offering big pay to inferior workmen because they have an infirmity. It costs too much "to make the wheels go round" to employ inexperienced workmen. But a person

who is a designer, cabinet maker, carver, and excels in these things, will be sought for, and paid *well*.

A designer and carver only stands high up on the pay roll, and our deaf boys and girls may as well stand there as any one else. I say girls, because girls wisely do not always stay within the limits men make for them, and in carving have been almost, if not quite as successful as men.

Almost all the fine furniture is carved more or less. Every large furniture store has its own designers and carvers, and the places are open to the *best*. This opens to our mutes an avenue long and broad; one, it seems to me, particularly adapted to them. One in which, with industry and perseverance, they can literally carve out for themselves an independent living and happy life.

MRS. GRIFFITH: I will ask Miss Jameson, of the Wisconsin institution, to give us some information as to her manner of teaching art.

DESIGNING.

MISS M. JAMESON: So much has been said in regard to manual labor as an element in the instruction of the deaf and dumb, and it is such an important branch of education, that I wish to present for your consideration a few facts in regard to designing, which is the first step in the direction of the more mechanical arts. To design is to arrange with definite mathematical proportions certain lines, figures, or conventional forms into a harmonious whole. In speaking of this subject, recently, Philip Gilbert Hamerton said: "The eye which is trained for drawing discerns form everywhere and in everything, and the hand which is skilled to use the pencil will be generally superior in delicacy and accuracy of touch to the hand which has never been taught. There are a thousand things to be done in ordinary life, in different trades and professions, in which accurate sight and sure touch are desirable; so that a branch of education which gives these has so much more in its favor."

There are three things, therefore, that are absolutely necessary to insure success: First, a trained mind to remember form; second, a trained eye to observe it; third, a trained hand to execute and obey the mind.

But a question immediately suggests itself, what is the best way to accomplish this training, especially in a child? While we have in view the ultimate purpose of giving him a thorough knowledge of art principles, we have also in view the general discipline of his powers, and a method which will at once teach him to plan, to observe, and to execute, is in all respects the best one for our use. We think we have found designing to accomplish our ends.

To gain any degree of skill in any kind of work much more practice in fundamental principles is necessary than a child is willing to give, be he deaf and dumb or possessed of

MORE THAN ORDINARY FACULTIES.

It is true some are born skillful, and some achieve skill, but by far the greater part are of ordinary capacity and have skill thrust upon them by the unwearying efforts of a careful teacher, who is usually limited for time. With twenty pupils and twenty minutes a day, how can she accomplish it? My method has been simple, perhaps faulty;

still let us give it a critical study and see how it answers the purpose. Beginning with the drawing of straight lines, perpendicular, and horizontal upon the blackboard; in the practice of which a perfect square, without rule or measure, is the first step. Every child can draw a square. Oh, but can he? He will do it a great many times before it is a perfect square. Thorough drill in measurement by the eye is necessary, and the child who can accomplish it without work is a genius. When he can draw it unfailingly his eye has begun its training. This square is taken as a foundation, and it is divided into different parts as the will of the designer dictates. These lines are traced and upon them the completed design in whiter chalk stands out. First simple geometrical figures are made, but the object of the teacher will be lost if only the conventional idea remains with the pupil. The observation and recognition of form is the aim, and this must not be lost sight of. As the hand becomes accustomed to drawing on such a large scale, step by step the lessons introduce parallel lines, curved lines, circles, and an infinite variety of forms such as we can always find in wall paper, oilcloth, and carpets, however, illustrating frequently by objects in and near the studio which are *not* artificial.

To do this the hand must, of necessity, have a great deal of practice; in fact, it receives its training in accuracy while following the design which the mind has previously formed. These exercises must be varied by original work, in which every child having a uniform foundation to begin upon, follows out some idea of his own, which in a short time he will be able to do; though at first he will only try to improve upon his teacher's work, which shows that at least his mind is at work grasping the idea of remembering form. It will be crude and unsatisfactory work at first, but by pointing out and suggesting forms the progress is made.

This method, while keeping the attention fixed upon the new design, gives the eye an admirable drill in measurement, and the hand is actively employed in drawing, again and again, a few simple lines, arranged in all possible positions, so that remarkable accuracy is obtained, as well as a breadth which the child will never forget. Designing awakens the faculty of observation, and teaches the wondering pupil that there is form everywhere, while it inspires him not only to imitate old form, but to create new for himself. When a certain degree of proficiency has been attained, natural forms should be substituted, for nothing is so undesirable as any cut-and-dried diagram work for children. Still, with the deaf and dumb, it is necessary to follow a method, for they are not like other children, and in the multiplicity of a confusion of ideas, they are apt to lose sight of the object in view. With their memory drawing I have sometimes been amused, for the form of their spoons and forks, as well as plates, have been woven into these designs. In a school where technical instruction is given with a view to practical application, designing may be carried on indefinitely; and as a foundation for wood carving and carpentering, as well as architecture, it is indispensable.

Too much stress cannot be laid upon the necessity of throwing the pupil upon his own resources. No helps of any kind should ever be allowed, for to use them will still the vigor of the young hand; and a child who becomes dependent upon copies and measures, will never be able to do without them. This applies to the general study

of art, as well as to the common application of art principles in manual labor.

Miss M. JAMESON (after reading the paper): I will give the outline of the work that is carried on in my school, and, also, some points which have given me a great deal of help in practicing with my children.

The Delevan Art School was established about three years ago, and out of the whole number of pupils in the school—two hundred—one hundred and twenty-five are regularly and systematically taught drawing. We have about one hundred pupils in the lower grades, and about twenty-five could be called advanced pupils, though they are not more than thirteen to fifteen years of age. If they stay as long as eight years we sometimes give them work in water colors and in oil colors. Of these we have had a few, but very few. In our lower grades the work is almost wholly limited to blackboard work and freehand drawing. They are taught to draw first simple designs; then the work from objects, limited to blackboard work, without being allowed the use of a ruler, or any measure of any kind. It is wholly freehand, and they are taught in the first place to measure from the eye wholly.

In the advanced work the children are taught first the simplest forms of designing, and then they go through designing from object drawing, perhaps in charcoal, or perhaps in crayon, and are advanced from crayon drawing, as the teacher sees fit. The work is fitted to the individual needs of the pupils.

There are four points which I have found of great help in my work with young children, and the first is perspective. In some of the eastern schools I have understood they do not pay much attention to perspective, saying that it is unnecessary, and that it is very hard to explain the principle. I find that the explanation of principle is unnecessary with the deaf and dumb; that by showing and giving them illustrations they can very easily be taught so that they can put these principles in practice, and not have anything to do with the explanation of rules. I have my pupils draw pictures of objects with which they are very familiar, for instance, the cheese factory which stands very near the institution, and they are required to draw that with exaggerated perspective, so that they can see for themselves in a very short time the axiom that the nearer objects are to your eye the larger they become.

Then the second point is the matter of class criticism. Children are very certain to learn a great deal quicker from being able to criticise the mistakes of others, than to have the criticisms of the teacher alone. I criticise all the work of my pupils before the class, but generally, as a class stands around the room, stop on one lesson, and each correct the lesson of the next scholar. In that way they gain a great deal.

The third point is drawing from memory. Deaf mutes are so limited in their means of communication with outsiders that if they can gain a rapid means of communication it is a great help to them. I try to have all of my pupils remember what they see when they go outside the school. One of my exercises is to come before the class with something which has been seen outside.

The fourth point is the public exhibition of work. I think that is one of the greatest helps that we have found in our school, to have all, or portions of all, the work that has been done during the year shown at the close of the year. I do not think it is a good plan to

make particular preparation for exhibition by having work done towards the last of the year for exhibition. I think the children should be made to understand that work taken from their lessons, from time to time, will be before the public.

Every Superintendent, I presume, finds great difficulty in arranging for a special time for the special pupils who come out of the class to be put into extra classes—the special classes, we call them. It seems as though some arrangement could be made by which teachers might have more of these special classes. We are all of us very much troubled to find time for these advanced pupils who are brighter, and ought not to be kept back with the lazy ones. Perhaps some one could make a suggestion as to how that could be accomplished.

DR. GILLET: We sacrifice the shops to that.

DR. PEET: I think that is legitimate, because they are connected—both relating to manual skill.

MADAME LE PRINCE, of New York, then read the following paper, which was received with applause:

Mr. Ely's questions are, "When shall we begin in art training? What shall we undertake first? What direction shall be given to pupils' work, and how much shall we expect of them?"

May I reply to these questions by discussing another?

TECHNICAL ART TRAINING.

The study of technical art is, or should be, the foundation of the industrial arts. Sound drawing is, or should be, the foundation of technical art. By the term technical art, I would include not only a knowledge of the various mediums, colors, process, etc., used in the industrial arts, but also a careful and intelligent study of the best, or copies of the best, works produced by leading artists and artisans from ancient to modern times. This knowledge is to the art teacher, student, or would be skilled artisan, precisely what the study of ancient and modern classics is to the writer, historian, or poet. It provides safe models for those who can but copy, suggests adaptations without limit to the more gifted, and chastens and ennobles the original design and invention of the few.

How can we best attain this knowledge and transmit it to our pupils? What is the condition of our art libraries for the deaf, as regards practical text-books and examples of art applied to industry? Again, is it not our duty as art teachers to become acquainted with the art treasures and their owners within a reasonable range of our studios, and to seize every opportunity to obtain permission for our pupils to visit public, private, or trade collections, or exhibitions of artistic work?

Art practiced as it should be in our institutions would prove not only a valuable advertisement, but also a successful lever in winning for them public attention and favor.

Thanks to the public exhibitions of the last twenty years, the educational departments of leading European nations have awakened to the value of elementary and technical art training, and every step in advance taken by one nation is keenly observed, and if successful, or likely to be, quickly adopted by the others.

Until recently the public mind has failed to grasp the value and practical utility of art applied to industry. It has classed drawing among the mere adjuncts of a higher education, or as an accomplish-

ment for young ladies in fashionable boarding schools, or, at the best, connected talent for drawing with special genius, and accorded to it but *one* career—that of the artist.

I believe the rapid change in public opinion in reference to the artist's profession, socially and pecuniarily, to be a foreshadowing of the increased consideration and respect about to be shown to sound drawing, not only as a means of education, but of practical utility in after life.

To help achieve this, we art teachers must rid our minds of ethics and sentiment, and lovely words and ideas about art, and teach our pupils to be precise and swift in execution, true to nature, and obedient to the broad principles of art which forbid beauty to trench on utility.

It is so far from being *true* that art leads to but one career—the artist's—that in nine of ten trades or professions drawing in some form or other is a necessity or a help. I do not believe it would be a hindrance to the tenth.

America is justly proud of her national schools, and colleges, and institutions, and will not lag behind, but strive to surpass other nations. The science, or rather its practical application, in our day schools, is new, good teachers are few, and, true to her unmatched mechanical instincts, America seeks a "system." I believe we are here to-day to seek and find a "system" adapted to the capacities of deaf-mutes, but I fear all search after a perfect system will end like that after the philosopher's stone. I believe the most admirable quality of a "system" to be its elasticity. May I quote the words of a teacher who is an ornament to your profession, Miss Ida Montgomery, mistress of our New York institution's high class for girls? "When I *commenced* teaching I knew a great deal; I had lovely theories; I had observed deaf-mutes *profoundly*, and elaborated a wonderful system for their education; I could have read you a paper *then*—but *now*, alas! twenty-one years of the school-room have knocked my theories into cocked hats, and my 'system' went to pieces long ago, like the 'deacon's one-horse shay.' One road, straight, and broad, is open to us, and I *know* that success lies in it. Let us learn '*to see*,' and teach '*seeing*' to our young pupils."

A child draws by instinct; he can draw, and loves to draw, long before he can write, or has the slightest desire to write. How are we developing this instinct? An American guide book to public school teaching (or teachers) recommends simple geometric outlines for first practice, on the plea that these are a correct basis for further development. Would a teacher of English be considered reasonable if she gave her babies Greek and Latin roots to learn because they are the foundation of the English language? The same book bids the teacher have beginners spell first the names of *familiar* objects, and advises the use of familiar illustrations to assist the mind in its first struggle with the difficulties of arithmetic. Is this quite logical, or fair? Why in this matter of drawing should we confine our children's tender fancy and quick imagination within geometric limits? Why throw away the wealth of aid in teaching that pictorial drawing affords?

I am aware that if a child loves his teacher well enough, he can be made to attack valiantly a whole army of triangles, pentagons, hexagons, etc., right on to ellipses with transverse and conjugate diameters. But is it well for the child, at its freshest, most eager, and

receptive age, to be chilled by such barebones of art? I believe there is a better, because more natural and less abstract way. Carry real things into your class-room; an egg, for example. Call attention to the beauty and smoothness of its unbroken curve; hold it between your children and the daylight; then in front of a darker background, that they may see for themselves how a change in the condition of its surroundings varies the play of light and shade on its surface. Then let your children watch you draw an egg—background, foreground, light, shadow, and reflected light [illustration by charcoal and white chalk on slate], the larger the better, call it an ostrich's egg if you like; never mind about construction lines and their long, hard names. Now, give your children charcoal and white chalk and let them try. In ten minutes, that is when they have discovered for themselves the difficulty of drawing without construction lines, attract the attention of group after group and explain to them your practical working methods. Amuse your children while instructing them. If you find a child in despair over an egg quite too shaky in outline, break it even a little more for him, and make a tiny head peep out from the breakage; little feet, too, if need be, and your pupil's face will change from despair to delight. Now, make use of your constructive methods for an ellipse, by fitting a bird's nest in a tree branch. Draw your lines upwards, downwards, across, and respectively. Hold up a cup, or some such hollow vessel, and call attention to the perspective changes occurring as height and position vary, and to *how* lights and shadows fall on rounded hollow bodies. Mark strongly, in black and white, on your drawing of a nest, these facts of appearance in nature, not forgetting little twigs, and bits of moss, and tiny eggs, and, if you have time, a mother bird watching—then leave your little ones to do as much as they can. It is all the better if you can bring to your lesson a real nest, with real eggs. Let a lesson in clay work, on same subject, follow this study of light and shade and facts in nature; and at a third lesson, if you can procure them, give cheap outline wood cuts of similar subjects to your children to tint in water color. (It is a good way in which to use up old time drawing books.) Give warm praise to those who use soft, well blending tints, and have not overrun the given lines. Tell them which colors best set off other colors, and give practical illustration of your color theories by means of colored chalks or pretty ribbons. I am far from having measured the *possibilities* of this kind of teaching, but so far the results have startled me, and confirmed my impression that mere outlines are to drawing as shorthand to writing, good when one *knows*. When a child looks at an object he does not see "outlines," he sees masses of light and shade; why strive to teach him art in the abstract, instead of training eye and hand to reproduce the *things he sees as he sees them*, and his heart to take in *to the full* these beauties in appearance. Geometric drawing cannot do this, and should come in later.

Our institutions for the deaf afford special facilities by large slates, and unlimited white chalk; these, with charcoal, clay, a few non-poisonous water colors and camel's hair brushes, with a plenty of knowledge and energy on the teacher's side, should suffice for primary classes. On entering the New York school I found a tendency to produce caricatures that varied only in the measure of ugliness. You will agree with me that this should be put down, and our pupils taught that caricatures lacking elements of truth and beauty are to

art as sin to morals. Passing from primary to succeeding classes, I have found the cross-grained French charcoal paper and charcoal to be best adapted to study from the "round;" geometric solids, Greek vases, etc., together with familiar objects taken from house and workshops. It is needful to vary this work by giving out words for original illustration in pen and ink. Charcoal permits breadth and freedom in handling and for erasure; original sketches in pen and ink necessitate forethought and precision. We use lithograph copies in our class-room to but one end; it is this, that in case of failure, or over-confidence, our pupils may *compare* their own productions with those of better men. We do not permit the copying of lithographs, believing that such copying adds no more to a pupil's knowledge than the mere copying of a poet's handwriting would enable one to appreciate his poetry. May I speak even more strongly? I believe this copying of lithographs to be a positive evil, twofold; it helps to propagate false and impractical notions of art, and becomes mere food for vanity on the part of pupils and parents—and, if I dared, I would say Superintendents of deaf-mute institutions! Better no art at all than a false, demoralizing art.

From out our second grade of pupils we pass the apparently gifted into a "special testing or training class," previous to admitting them into our "working studios" for boys and for girls. In these studios we teach art-crafts during workshop hours. We have but one *mixed* class; it is our life class, and so far has been the most serious. We are scarcely ripe for it, but it is an excellent corrective. It gives to those considered by themselves and companions as rather above the average "smartness," a vivid sense of no success without earnest effort, and leaves them sobered and strengthened. So far it has been well with us as a young studio, and comparatively, but you and I and all art teachers of to-day have a problem to solve. It is this: How best to make art enhance the value of mercantile produce. Were I quite American I should put it this way: How can America keep within her shores the immense sums she spends yearly on foreign art produce? By giving to her children and artisans practical art culture. Carlyle says, "Your America is here or nowhere." Do the duty which lies nearest thee, which thou knowest to be a duty; thy second duty will already have become clearer. Let us then study *first* our workshop needs. If our art departments do not become a power for good in these, they have failed in their mission.

On entering the New York school I fitted my art department to existing conditions of class organization till I should gain experience in deaf-mute teaching, and earn the confidence of my Directors and Principal. Next term I have Dr. Peet's consent to grade my drawing pupils according to their trades, and here lies the pith of the matter. It is not so much *fine art* as art applied to industry deaf-mute institutions require. We need just that kind of art training which will make of a good shoemaker a better shoemaker, and of our carpenters, cabinet makers, and carvers, printers, and tailors, more expert and precise workmen.

The drawing of lilies and roses may, probably will, enable a shoemaker to place his stitches more evenly; but the modeling of lasts to measure, and careful drawing of the shapes and sizes used in his trade, and a fair knowledge of the mechanism of the human foot would help him better.

We need in our studios good light and good humor, any amount of

good casts and examples, order, and that economy in choice of material which proves to be best in the long run. We need the vigor, discipline, and variety that comes of facing squarely nature, art, and the needs of manufacture.

The New Orleans and American Institute exhibits have helped to prove that in this field of art education there is no distinction between the deaf and hearing children; they awarded "distinction" to the deaf. Would it not be false kindness to our pupils to exact of them *less* than from hearing speakers, seeing that in after life they must do good work more swiftly and cheaply than hearing competitors, if they would win in the race of life.

DR. GILLETT: How soon would you introduce such an exercise as you have given first; that is, the egg?

MADAME LE PRINCE: As soon as the child enters the school. I think the more natural the system with little children, the better.

DR. GILLETT: You reject entirely geometrical drawing.

MADAME LE PRINCE: At first. I think geometry is a matter of reason, and should come in with the reason.

DR. GILLETT: Have you any particular time when you commence geometrical instruction?

MADAME LE PRINCE: When the children leave the primary classes, and Dr. Peet thinks they are fit to rise higher in the scale of instruction, according to our present organization, then I put them into the special classes. I commence teaching our pupils drawing as soon as I can, the first day they enter school. The most successful thing we have had in our school was a commencement exercise in which a drawing bigger than herself was made by a child five or six years old.

MR. WALKER: What time is given to your work with your first pupils?

MADAME LE PRINCE: Dr. Peet gives me for each pupil one hour a week for primary drawing. Those who are put into the higher classes, receive one hour a week more. As soon as they pass into the working studios, they have workshop hours. We teach one hour a week for each class, which means an hour for each pupil; one hundred and sixty pupils once a week.

DR. I. L. PEET: I will explain that in our lip reading hour, the fourth hour of the morning, and of the afternoon, we take one hour a week from each class for drawing. Madame Le Prince has a room especially for class instruction, and each class is assigned a day in each week, always, at eleven o'clock. They come to her in this room, and she teaches them for one hour a week. It is utterly impossible for her to go through so many classes with simply one hour a week, and she gives two hours of instructions a day to the classes, one hour in the morning and one in the afternoon. The next week the teacher of the class repeats the exercise which Madame Le Prince gave the week before, so that the lesson is practically repeated. And our instructors are so much interested in this matter of art that they take a lesson from Madame Le Prince themselves once a week, every Monday afternoon for an hour after school, and they all learn the principles of drawing, so that they can impart them to their classes. The teachers are willing to do this, because they feel as if it was exceeding important to the deaf and dumb to learn drawing; and they feel great pride in their own classes, and are willing and anxious to assist them.

DR. GILLETT: Then each pupil has Madame Le Prince's instruction one hour each two weeks.

DR. PEET: Yes, sir; but has a drawing lesson one hour each week. [Applause.]

MR. ELMENDORF: I should like to ask Madame Le Prince, how many pupils she has had all in one class.

MADAME LE PRINCE: Just as many as I can attend to. They vary from nine to thirty-two.

MR. ELMENDORF: How many should you like to have?

MADAME LE PRINCE: As few as possible.

MR. ELMENDORF: In the few remarks I wished to make, Miss Jame-son has stolen all of my thunder. I approve of her method, which is exactly the one that I follow in every respect, and I agree with her exactly. I think it has had admirable results. I should go first to the little ones with objects. I think I am to speak on mechanical drawing—drawing, as applied to the industries, and the results shown.

I have had a great deal of experience in obtaining positions for some of our boys, and I have been astonished at the ease with which I could obtain a position for a boy who could sit down, and, for instance, draw a cup leaning toward him, like this. [Showing.] I have also had one man who wished to employ a boy, take out his watch, and tell him to draw it in a certain position, and then in another position. It is our duty to teach a pupil that there is a difference between a watch held in one position and one in another. I teach my pupils to draw a table, for instance, in its different positions. I do not teach them the art of perspective. What is the use? I simply take a table and show it to them in one position, and then tip it a little, and thus show them the table in its different positions, and, finally, they become accustomed to seeing things reduced to a level, and in that way make very rapid progress. Don't take pictures, and don't ever put your pencil on a scholar's drawing. [Applause.] If you do, you have taken away the open sesame for that child. It is something for that child to take up a picture, and when asked, "Did you draw that?" to answer, "Yes, sir; a part of it." "Who drew it?" "My teacher." I believe the deaf-mutes are the most honest set of children I ever saw. [Applause.] I believe there is nothing they wish to deceive in, and particularly about their own work. I have seen children take up drawings and paintings, and throw them down with that expression. I have also seen them come to me and say to me, "I did that." And they were just as proud of it as if it was the finest in the land. Why? Because their own hands did it. You may ask, how can I correct them? Suppose a boy brings me a drawing of this table. I say, "That is wrong; look at the table, and draw it the best you can." He draws it again, and then I say, "Try it again." And that boy will try; he knows I will not touch his paper, and he will try and try; and sometimes he will succeed, and sometimes not. Sometimes I have to show him on my hand, and he looks at his drawing and sees where the mistake is. I chalk it right in my hand, and allow him to look at it but a second; and he takes my idea and works it out himself. My pencil does not go on his paper.

When it comes to shading the same plan is followed out. If he is drawing an egg, he may get the shadow right where the high light ought to be. I tell him, "You have got everything upside down; that won't do." He thinks it is very strange. I simply chalk it on my hand just to show him where is the light, and where the shadow, and then I rub it off my hand.

Coming to mechanical drawing, I shall leave out entirely what I

call designing, as the method shown by Miss Jameson is exactly the method I follow. I would like to add, that in the classes I have—from eighteen to twenty in the highest class, twelve to fourteen in the second, and about ten in the third—I have nothing to do with either water or oil colors. I am simply working for an end in a different way. The artistic point of view, as in coloring, I have nothing to do with. I am simply trying to give them an idea of form, measuring with the eye, or the delicate handling of their fingers, so that afterwards if they have to make a line drawing without measurements they would be able to do it with instruction from their master, or their "boss," as they call it. Take, for instance, this designing. Twice a week I have a class one hour at a time—on Tuesdays and Thursdays. They bring me from one to five designs drawn on common manilla paper, original designs drawn in pencil. On Monday morning they bring me three chosen designs that I have chosen, from all those drawn, in ink, without ruler, without measure, and without compass; simply freehand drawing in ink. Those I keep. At the end of the year I take all of these ink drawings and spread them along the wall with pins, and ask the children to go and choose the design which they think is the best design for an oilcloth, or which they think would be a fine design for a frieze, or which for a book cover border, skiver, or anything that I happen to think of at the time. And they choose their own designs from all of those that have been drawn by everybody. Then I say, "Work that up into a book cover border, or multiply it." The drawings are generally four inches by four inches, and I have them work it up so as to make it ten by twelve, so that it will make a square foot of design on brown manilla paper, to see if it will work into a working design.

Then, to go on with mechanical drawing, I simply begin by teaching them to draw a straight line with the ruler. I have not yet seen a child in our school that could do it. It takes at least a month to draw a line to satisfy me, even with a ruler. In the first place they do not know how to sharpen their pencils, and it takes me a week to teach them that without breaking it or wasting time. They must learn to prepare their tools, because when they get into work, a workman is known by his tools. When they get to work they must have perfect working tools, and keep them in perfect order. An employer looks at a boy, and sees his tools, and says, "I will take that boy," right away. And this is my experience that I am relating now. Their pencils must be kept in perfect order. A pencil, a six-eighths artist's pencil, a little compass, a straight edge, a T square, a drawing board, and a triangle. That is all we use. Begin by teaching them the proper use of those tools, how to hold the pencil for different purposes, how to keep that pencil sharp with a needle point or a flat edge for certain purposes, and then teach them to draw a straight line. You think it is a very easy thing to draw a straight line if you have a perfectly straight edge. But try it. The line must be mathematically straight. After they have drawn a clean straight line on brown manilla paper, I say, "Draw another exactly the same length, and do not use a measure." They attempt it, and some of them do pretty well after having had all of this preliminary training in designing, and so forth. "Now take your compass and measure." They measure, and they are very much surprised to find that they are not exactly of the same length. "Make them the same length." Then I give them horizontal lines, vertical lines, and perpendicular lines,

and then we go on with the different angles, the right angle, the acute, and the obtuse, triangles, squares, parallel lines, and so forth, in mechanical drawing.

What is this for? It is simply to give them absolute precision. For mechanical drawing the work must be exact. This mechanical drawing I bring into play in addition to this designing. In drawing frieze or oilcloth work everything has to be exact, and particularly for the photogravure process, a mechanical process which we have in New York, and which some of our boys seem peculiarly fitted for. I advocate the use of color in every school, particularly in common object drawing. Last year I obtained places for three different boys, one of them in the "Puck" office, New York. They seemed to treat me very coolly. I showed them his pen and ink mechanical drawings, and they said, "Yes, they are very good indeed; his hand is well trained, and he is exact, but we have no work for apprentices." I said to them, "I wish you would look at these just a moment. I know you use color," and I opened five or six common objects, one of which was a beet, and he said, "That changes the whole thing. We will take that boy." He said, "His hand is trained, and he has an idea of color and form." And those who are teaching drawing in our schools, to this practical end, will find it of invaluable benefit to the deaf-mute. I do not believe in knocking it into them, but those who have any talent at all they will be so well paid that you will never regret that you taught it in a practical way. [Applause.]

MR. MOSES: I think the last speaker has struck a practical note in this matter, when he has told us of the positions he has secured for pupils. I desire to ask him how long he has been turning out graduates from this school in this way.

MR. ELMENDORF: I do not know, as I have only been there four years. But since I have been there they have been graduating boys in this way, and we have found positions for several boys. He had been in training in this branch only for about six months. It is a comparatively new thing in our school; it has not been over six or eight years that particular designing and industrial drawing has been used there, as far as I know. I only speak for the last four years.

MR. MOSES: What proportion of the young men that go out from the school have had this training?

MR. ELMENDORF: All of them except those who have no talent whatever for drawing. They simply have the drawing lessons.

MR. MOSES: What proportion of the pupils who go out so trained are able to get positions by which they can make a living?

MR. ELMENDORF: I cannot say, but every one I have tried to get a position for has got it. Here I can refer to eight or ten.

MR. WALKER: I desire to ask Professor Elmendorf how long his pupils are under instruction before they begin mechanical drawing?

MR. ELMENDORF: They begin mechanical drawing only in the last three years of the course.

MR. CROUTER: Is this work of teaching drawing in addition to your other duties?

MR. ELMENDORF: Yes, sir; two hours a week only. About three quarters of our teachers teach drawing. This is simply a specialty.

DR. PEET: Madame Le Prince has received a letter from Mr. Black, of the Royal Commission for the Blind and the Deaf and Dumb, London, England, and there occurs this passage with reference to this convention: "This commission will gladly welcome any information

bearing on their inquiries, and any resolution emanating from the convention, and communicated officially to this commission, would be especially valuable in the eyes of this commission." This is in reference to art. And perhaps the proper resolution might be passed in the convention this afternoon.

THE CHAIRMAN: You will please draw up such resolution.

The next subject in order is "Oral Instruction," to be led by Miss Laura D. Richards, of Philadelphia.

MISS RICHARDS then read the following paper on Oral Instruction, which was received with great applause:

My first work with a class of beginners is to regulate their breathing. It is of the first importance in securing good, firm tones. Most deaf children breathe very irregularly, inhaling and expelling the breath through the nose and mouth at the same time, and when it is vocalized they must therefore give nasal tones. Let individual drill be given. Have each child come to you and exhale and expel the breath with the nasal passage closed, thus forming the habit of sending it through the mouth instead of the nose. Pupils will at first breathe from the top of the lungs, and very feebly, but by degrees they will breathe deeper and firmer, until they fill the lungs and breathe as strong as necessary. On correct breathing depends all voice tones. If a child fills its lungs and can hold its breath well, its voice will be low, strong, and firm; but when it breathes only from the top of the lungs, its voice will be high and throaty. I continue this breathing exercise, giving it twice and often three times a day, for at least three months. After that I give it once a day. Let me say that this is not the easiest exercise for the teacher; but proper breathing is of such importance that every effort should be made to acquire it. Another exercise is to free the muscles of the lips, tongue, and throat, and to make the tongue as nearly flat as possible. If the tongue lies flat the voice can pass out of the mouth clear and full; but if it is drawn back into the back part of the mouth, filling the throat (which is often the case), the voice will be thick and disagreeable.

In conducting this exercise each child should be provided with a hand mirror, and all perform the exercise together.

It is my practice to go through each exercise myself, then have the children imitate me. It is always better to give them an example of what you want them to do, and encourage them to imitate you, than to require them to go through their exercises independently and unguided.

In giving the vowels I have found it better to begin with "ä," because when giving it the tongue lies perfectly flat and the throat is well open. When giving the vowels it is necessary to drill each child separately, directing its attention to the chest. If that is made to vibrate the voice will be low and strong. We cannot have a high-pitched voice if the chest is made to vibrate well while speaking. There is no need of having high-pitched voices. It is the teacher's fault if the voices are poor; on her depends the quality of the tones.

We should not force voice at the beginning. The muscles of the mouth should be kept free, yet the child should use sufficient energy to put life into the work. We must work very slowly with the voice; in deaf children—*true* deaf children—it is a product of slow growth and demands careful nursing. After securing a pleasant voice with "ä" give "â," because with it as with "ä" the tongue is kept low and the throat free. For "â" the tongue is lower than for "ä," and the

voice must be deeper and it should be stronger. Then we have "ō." For this we have two positions, the first like broad "ā," then the rounding of the lips. In giving "ōō" we have the same position as for last part of "ō." We take the same position for "ö" as for broad "ā," the only difference is the position is not held as long as for "ā."

Next we have the front vowels. It is better to wait until the consonant "s" has been given before giving "ē," because for it we have nearly the same position as for "s," the only difference is that the teeth are a trifle farther apart for "ē" than for "s." When the pupils can give a good "ē," let "ī," "ē," and "ä" be given by gradually opening the mouth farther and farther.

In giving the consonants it has been my custom to give "f" first, because I get more force with it at first than with "p," which is commonly given.

As soon as I have a consonant and a vowel I combine them, as "fa," "fa," "fä," "fä." Next give "p," and then make another combination, and when they can say that easily, we have the word "papa." I then give them the word with its meaning. Now give "wh," "th," etc., giving the easiest first. One is apt to have difficulty with "t," unless the pupils have free use of their tongues; therefore it is better to leave it until one of the last. After securing good voiceless consonants, give those with voice, beginning with "w" and "l." In giving "l" the tendency is to close the mouth passage and give a nasal sound. To overcome this difficulty, give exercises with the mirror.

Make the tongue as narrow and pointed as possible, while depressing it at the back, and then bring the point up to the upper gum, leaving a space over the side for the voice to pass out. I continue making combinations. "S" is quite troublesome. (Tell how it is made.) The tendency is to let the tongue fill the mouth, closing the passage through the middle of it. Separate the teeth and open the passage with a pencil or anything small, and it can be easily given. Let the child hold its hand before your mouth to feel your breath while you give it, then give it after you. It is better to save "s" with "t" until the last.

We often have difficulty with "k." When I have a pupil who cannot give it, and another who gives it very well, I let that child work with the one that fails, and I am sure to have a good "k" very soon from the child who failed with me. I have never known this plan to fail. I find that they understand each other much better than they do me, and that a pupil will frequently learn much sooner from another pupil than from me. Each pupil strives to be first, and I try to cultivate that spirit among them.

I think this the cause of their learning so quickly from each other. I try to excite emulation and pride in their work, and my pupils are very proud of talking. As soon as I give an element—"f," for instance—I expect them to take it from my lips and write it on their slates, and I give them all the single elements to write from my lips throughout the first year.

I give individual drill, but I strive as much as possible to give class drill also, since by so doing one can save much time. Try to keep them busy, and when resting from articulation teach language and lip reading.

I begin language teaching by showing them an object or picture. A school-room should be well furnished with toys. We will show them a ball first, because that will interest them. I ask its name, and

when I find that none can give it, I write the word "ball" on the large slate and have them copy it. I now show them a cat, and write that word on the slate too. After they have written these words several times, I show one of the objects, asking for its name. When they can write the name as soon as the object is shown, I speak it very slowly, repeating it again and again, and they write it from my lips. Then I give them the other word, "cat." I give these words first, because the first element of one is made with the lips closed, and of the other with the back of the tongue closed. I repeat these words until I know by their faces that they are sure of them. I then ask them to show me the ball, and they show me first to the word and then the object; and those who forget are sure to be told by those who remember that they are not very smart.

I give them five or six name words, and let them remain on a large slate, that they may be constantly before them. We work with these words until they are tired of them and want new ones, and ask the names of the different objects in the school-room, which they very soon will do if they are kept interested. As soon as they can form the letters, I have them put all their little wants into words, or I do it for them, and they copy it, leaving it on a large slate for their use whenever the same thing is wanted again.

When a child has something to tell we stop everything until he has made himself understood, and it is written on a slate so that all can see it; then we spell it with our fingers.

They soon understand that their thoughts can all be put on the slate for them to see, and they are very much interested as well as pleased. This interrupts the regular school work, but it is time well spent.

In teaching the elements try to teach those first which they can give most easily, and as soon as possible give a word—"a" has been given, "f" has been given too, "l" comes soon, and we have the word "fall," which is easy for them to speak. Now we have a word to study, and all are very much pleased. As soon as we have "w" and "sh" we have "wash" and "shawl." As the vocal organs have the same position in giving "p" and "b," with voice added for "b," we have the word "ball." We repeat these words again and again—"wash," "fall," "ball," "shawl." We have now gained another point and have a lesson for the evening. They write this lesson on their slates and study it during the evening study hour, speaking every word. In the morning each child recites orally the lesson committed to memory. For the next lesson we change the order of the words—"fall," "shawl," "wash," "ball." We continue in this manner until we have a number of words. As we have the words "wash" and "ball," we have an action to perform.

I try to keep them interested every moment. I cannot have a careless, thoughtless child. We now have "wash the ball." I speak the words and they write them. I also write them on the large slate, and give them the meaning of the word "wash." We have a basin of water and wash the ball, repeating the action many times. And each time it is performed they write it; but do not speak it, because the combination "shed" is very difficult to give; but they know the meaning of each. We now have, wash the wall; and they have wash the ball and wash the wall for their lesson in the evening.

When they can write the name of several objects, I give them action writing, even before they can speak the words. We continue with a

few simple actions until they are able to speak them; then they take them for their lessons out of school. I try to have each child understand every word in the sentence before speaking it, and firmly believe that their knowing the meaning of the words they are attempting to speak aids them very much in their articulation.

I know this is not the method pursued by many oral teachers; but it is the one I have pursued, and I believe with a success that fully warrants its continuance.

MR. W. K. ARGO, of Kentucky: How many pupils did you have in your class?

MISS RICHARDS: I had ten pupils last year.

MR. S. T. WALKER: In the examination of my class in articulation I have found two principal difficulties, which, perhaps, Miss Richards can give me some light upon. I find that congenital mutes, when they try to combine elements that they have learned from their teachers, into words, they give the elements so distinctly as to make the word unintelligible. For instance, take the word "ball." They have learned the elements of that word separately, and when they come to pronounce the word, after several months explanation, they do not seem to be able to make a proper coalescence of the elements. They pronounce it "b-aw-l." Another difficulty is the forming of certain letters or elements, like the letter "k," and they put too much voice in it. I think I understood Miss Richards' explanation of that, however.

In regard to the difficulty in the coalescence of the elements that they have first learned, would it not be better to try to teach the words as units, rather than as so many parts.

MISS RICHARDS: I prefer giving the elements first, but some prefer giving the words as a whole. If I desired to teach the word "ball," for instance, I would first teach them to give it easily, having the free use of their throat. That is one trouble that deaf children have; their throat is kept too rigid. The muscles of the throat should be as free as possible. I should give them the sound of "p," and then teach them to say "p-p-p," a great many times before I gave the word "ball." "P" and "b" are nearly the same. If they do not give any voice at first, it does not matter. I would teach it so easily that they will gradually come into the habit of saying "ball," "ball."

MR. WALKER: How do you teach a rapid transition from one word to another, in every sentence?

MISS RICHARDS: I differ from many teachers in this respect. I have them speak the words separately at first. I teach them to use the article with the following word. But at first, to get a distinct articulation, I should have them give each word separately; and after they have acquired distinct articulation, then I should teach them to lap the words as though they were written in one word.

MR. WALKER: At what stage of instruction do they commence lapping?

MISS RICHARDS: I have been teaching this class for a year; and I have just begun to teach the lapping. Some of them could acquire it sooner than others. If they are free with their vocal organs, they will get it sooner.

DR. P. G. GILLET: I regard this as one of the very important questions upon which we wish to get light from all points of view. I suppose the whole subject has been under discussion and criticism, and there are many I would like to hear from. I would like to know

how nearly they coincide with the view expressed in Miss Richards' presentation of these points.

REV. THOMAS GALLAUDET: I would like to ask Miss Richards if she uses symbols for all of the visible speech?

MISS RICHARDS: No, sir; I give the elements of the language first, and then the letters.

REV. THOMAS GALLAUDET: By what method do you give your pupils the meaning of the words you write out on the slate?

MISS RICHARDS: If I desire to give them the word "wash," I should take a ball and perform the action. If I desire to tell them to "open the door," I would open it to show them what I meant.

I will ask Sister Mary Ann to state how they teach in their school. I believe they teach articulation, and we would like to hear what they are doing.

SISTER MARY ANN, Principal of the institution at Buffalo, N. Y.: I have not come here prepared to say anything, but as the question has been asked me, I will state that I think we have one advantage, although our system is somewhat the same as Miss Richards has explained to us. At our school all the pupils use signs before we commence to teach them articulation. Therefore, all of our pupils become interested in the little deaf-mute who comes to school, and they take it, and play with it, and talk with it, and make signs to it. When the child is ready to come to the class—it may be the first day—as it comes before the teacher we adopt whatever method will please the child most. And in showing the child an object, we do not prevent the child making the sign of the object. At the same time we do not prevent the child trying to use the name of the object. Of course it is an understood thing that the elements are also taught. The most of our children have studied the method of articulation. I think it was about sixteen years ago that we took up the method of articulation. At that time my attention was drawn to the subject by Professor Bell. We have also discarded in some respects the use of symbols, because we think it is the loss of time. We use the elements, and also exercise them on syllables and words from the first moment they come into the class. If they can use the hand, or if they can use a book, or even if they make an attempt to use it, we allow them to do so.

I am not engaged in this work, and I have not been for some years, myself. We give great liberty to our teachers. At the same time they are all well instructed in both the sign language and the articulation method. Our teachers have been drilled by the older teachers, and they also have had the advantage of going to articulation schools and studying up the methods of articulation as used now in any of the schools, and I suppose in every school throughout the country. The sister who is with me is engaged in the work, and if she wishes to say anything in addition to what I have said she will do so.

MISS RICHARDS: We shall be very glad to hear from Sister Dositheus.

SISTER MARY DOSITHEUS: Our younger pupils are taught by the word method, giving them words as a whole and not the elements at first. The teacher shows an object to the pupil and speaks the name, which the child tries to repeat, such as "fan," "top," "lamb," "ball," etc. The pupils learn to speak the word, then to spell it, using the manual alphabet, and finally to write it.

After they have learned a great many words in this way, they are anxious for a key to speech, so that they may get new words themselves. The elements are taught them.

Last year I had a class of boys congenitally deaf, or practically so, whose ages were from fourteen to sixteen years. Some of them had been taught by the word method before they came to me, and could speak a great many words. Some had never been taught articulation, but as their mental development was about the same as that of the former, they improved nearly as rapidly, with this difference, that they did not speak with as great ease, not having had practice enough in using the vocal organs. After learning the elements they have no difficulty in speaking every word they meet with, if it were not for the irregularities in our English spelling. We formerly taught the pupils Bell's Visible Speech symbols, but think it takes up too much time without helping them sufficiently.

At present, in teaching an element a diagram of the vocal organs used in that element is made on the large slate by the teacher. The pupil's attention is called to the principal active organs, viz.: the under lip, the point of the tongue, the top or front of the tongue, and the back of the tongue. If a pupil takes a wrong position, his attention is called to it by making one of these curves:) under lip; ∪ point of tongue; ∩ top of tongue; (back of tongue, which enables him to see his mistake.

We now use the diacritical marks, using Worcester's dictionary instead of the visible speech symbols; not spelling words according to sound, but writing them correctly, drawing a line through the silent letters, and writing the equivalents of other letters or combinations above the same with the corresponding diacritical marks. The drill in lip reading is given with the single elements, syllables and words, so as to avoid guesswork, with a sentence thrown in by way of encouragement. I have entire charge of my class in the school-room. I teach articulation and lip reading one and a half hours every day. In teaching arithmetic, geography, etc., I use speech as much as I can, but also use the manual alphabet and signs. My pupils speak or write the answers.

The semi-mute class is in charge of another teacher who teaches orally, sometimes making use of the manual alphabet and signs when they are a help.

MISS RICHARDS: I believe Miss Fish has something to say as to her method of teaching the vowel sounds.

MISS FISH, of Maryland: Four years ago I carried visible speech with me to Maryland. I supposed there was nothing to take the place of it—that I could not possibly teach without it. When Mr. Ely put me down before my class he said, "I do not want you to use visible speech." I was completely at a loss what to do, but after several plans had been tried I took the translation of Professor Bell's Visible Speech Chart as it was used in Northampton, and found it answered my purpose entirely. Each letter or combination of letters represents an arbitrary sound, and by them pronunciation can be corrected just as readily as with the symbols.

p	s	ē	{ a	ōō	
t	sh	ī	{ ar	ōō	
k	sh	ā	{ ah	ū	ō
			{ er	{ au	
b	l	ě	{ ir	{ or	
d	l	ă	{ ur	{ ō	
q	r	ī	{ ou	{ oe	ū
m	r		{ ow	{ oy	
n	wh				nk = } ngk
ng	ch	x=ks			nc = }
f	j	qu=kwh			c = { k
v					{ s
th					pf=f
th					

I teach all of the sounds separately, except "l." I teach that in combination. I spell all of my words correctly when I am giving a child a sentence, according to the English method.

MR. CLARK: Do you use diagrams or drawings of the vocal organs in teaching?

MISS FISH: I use mirrors.

MR. JENKINS: Have you not found value in the analysis which Professor Bell makes of the vocal organs, and so forth, in an increased delicacy of ear? Are you not able to correct faults by having studied the action of the vocal organs as a whole?

MISS FISH: Certainly. I think it is very necessary for the teacher to understand the location of all the organs of speech, and I teach it to the child.

MR. ELY: Do you not find that a knowledge of Professor Bell's system of visible speech is of advantage in your teaching?

MISS FISH: Certainly; a knowledge of his system is absolutely necessary to a teacher of articulation; but not necessarily a knowledge of the symbols.

PROF. SAMUEL PORTER, of Washington: I would like to ask whether, in teaching the elementary sounds of consonants, the teachers are particular to give the true forms, as one is initial and the other is terminal. For instance, the "p" in "hope" is different from the "p" in "par." In the word "quick" you have the two forms of "k," the initial and the terminal—two different actions. I wish to ask whether the teachers are particular to make that distinction with different actions of the organs, as the consonants are terminal or initial; whether teachers of elementary forms of consonants are particular to drill their pupils in these two particular forms?

MISS RICHARDS: Yes, sir; I teach them that that sound is to be made very gently at the end of a word. And I have no trouble with that.

MISS TRUE, of Rochester, New York: In case of any mistake made by a child, do you put that mistake before the child by some sign, or on the board?

MISS RICHARDS: Yes; I allow the whole school to see the mistakes. For instance, if I was to write on the board the word "pa," and the child gave it "par," I should write "par."

MISS TRUE: I give the initial consonant first. I use Bell's system.

MISS RICHARDS: I believe a knowledge of Bell's system is very necessary for a teacher. I think it takes one to the very root of all speech; but I think it is very laborious for the children.

MR. WILLIAMS: You say that you believe a knowledge of Bell's system is very necessary for a teacher. Do you mean that that particular system is necessary, or that it is necessary that the teacher should understand the principles of vocal physiology, which I understand are just the same in Greenberger's system as in Bell's system of visible speech? If a teacher understands vocal physiology, whether he gets it from Bell's or Greenberger's system, does it make any difference?

MISS RICHARDS: No, sir; it does not, but, perhaps, because I studied Bell's system, I feel that I can get it clearer by that particular system. I studied it with Professor Bell, and realized that there was something in it to take hold of. I believe that our articulation teachers should go to the very root of the language, the mechanism of speech, and if Bell's system will enable them to do it, take that; if it will not, take something else that will. So long as the thing is reached it does not matter how.

DR. GALLAUDET: In the Kendall Green school, at Washington, the symbols of visible speech have been taught to our pupils to a considerable extent, but our teacher is using them rather less and less in teaching the pupils. She, herself, is well grounded in the system, understands it thoroughly, and makes use of it at various points as a means of assistance, but she does not use it as much as she did in the beginning, that is to teach symbols to all pupils, and require its use by them.

MR. MOSES: I have used that system more or less, and I find it of some assistance.

MR. WILLIAMS: Does your teacher understand thoroughly any system of vocal physiology?

MR. MOSES: He understands diacritical marking.

DR. GALLAUDET: In some instances with semi-mutes I have corrected defective pronunciation by simply spelling phonetically, and it succeeds perfectly. A young man once traveling with me mispronounced the Schuylkill River, and I immediately corrected his pronunciation by giving the spelling of a word with which he was familiar, and he pronounced it correctly without difficulty.

MISS RICHARDS: It takes three months' drill to perfect a child in visible speech, and while you are teaching that you are not teaching anything else. Why not spend that three months in giving the child the elements of the language? A child knows visible speech, and it is taught to pronounce through visible speech. When it goes from school who will write visible speech for it? Its teacher or those who understand visible speech can do it, but how many people in a sign school or any other school understands the system of visible speech? One special teacher understands it.

MR. F. D. CLARK: I think the same thing applies to all of our helps, diacritical systems, diagrams, and so forth.

MISS RICHARDS: We teach the diacritical marks, and they have them always.

MR. NOYES: It strikes me that we have right here a very practical suggestion, that this Bell system of visible speech is a mere help to our children in their ordinary efforts to obtain language. I wish to inquire which is the most useful dictionary under that system.

MISS RICHARDS: I think that Worcester's dictionary is used most in the East, and Webster's in the West.

Here the normal section adjourned until to-morrow morning, at nine o'clock.

TUESDAY, JULY 20, 1886.

PRESIDENT GILLET in the chair called the convention to order.

MR. G. O. FAY, of Connecticut, offered a prayer.

The Secretary read the minutes of the last session, which were approved.

THE CHAIRMAN: The next paper to be read is entitled "Technical Education," by Mr. F. D. Clark, of Arkansas.

MR. CLARK:

TECHNICAL EDUCATION.

The high honor of establishing the first schools in this country where any persistent attempt was made to teach trades, belongs to the institutions for the deaf. But, though we began first, I hardly think we are keeping abreast of those who started later in the race.

For a long, long time there was little said, or, apparently, thought of the importance of teaching the use of tools, the peculiarities of materials, or the methods of working. Professor Wilkinson, by his article on the Russian system, a year ago, drew much attention to this subject, but, so far as I have learned, the California institution is the only one that has made any real attempt to follow this system, and there it is used, if I understand correctly, only in the carpenter shop. At most of the institutions the trades, with, perhaps, the single exception of printing, are not taught, but the pupils are allowed to learn what they can of them by spending some hours a day at work in the shops. In none, so far as I am aware, is there any regular course of instruction, any examination, or any attempt at either.

One of the curiosities of our modern life is the care and precision with which accomplishments requiring the use of our physical powers are taught, and the extreme indifference which we show to the learning of useful employments. If a boy wishes to learn to dance it is easy for him to find skilled teachers to analyze the step, train him in each portion of it, and soon make him an expert. Should he take to rowing, he has the same advantages offered to him; his teacher will carefully explain to him each of the few movements that constitute that art; he can even find books in which separate chapters, carefully illustrated, are devoted to "the catch," "the stroke," "the feather," "the recover," "the use of the legs," etc.; and teachers who will watch him carefully and check him at the beginning of every fault. So with every other amusement where skill is required. Boxing, fencing, riding, etc., all have their special teachers; and all need them, too, for even in such a simple exercise as running it is rare to find a boy who can use all the physical powers required to their best advantage 'till he has been taught to do so. Why cannot we have masters who will teach the use of tools as carefully and thoroughly as these teach the use of playthings? Perhaps the reason why it takes a boy so much longer to learn to saw accurately than to row swiftly is that he is taught to row, and left to find out for himself the knack of sawing.

Suppose we simply told a pupil in school to add, and never taught him to carry. He might, after long effort, find it out for himself, but

his progress in arithmetic would probably be very slow; yet that is the way trades are taught. The help that the master gives is often worse than none. He "lays off" the work and leaves the pupil to do it. Better let the pupil "lay off," and teach him how to work. There is much more in sawing than in working a saw up and down, and yet the instruction given is to give the boy a saw—too often a dull one—and tell him to saw. If he makes mistakes they may be pointed out, but the reason why he made them is very seldom explained to him. So it is with every other tool. If there is any possibility of a boy picking up the knowledge necessary to use it on the job in hand, he is left to do so; if not, so much of its use as there is present pressing need for is explained, and no more.

Are the masters of the shops responsible for this state of things? I do not think so. They have been brought up to think that it takes seven years to learn a trade. Their efficiency is judged, not by the shortness of the time in which they can teach a boy their trade, or the number they teach, but by the amount of finished work they turn out—by the dollars and cents the shop makes or saves.

This is the fundamental error that lies at the root of all our mechanical teaching, and causes much of our trouble. We expect profitable work from learners. For institutions where the time allowed each pupil is long, the present system is not even the most profitable. It would pay them better to teach the trade first, at a dead loss, and have good workmen later. For the few dollars that are saved by the present plan, we throw away our chances of making quick and accurate workmen, and probably lose more than we gain.

There should be a course through the shops of an institution, just as there is through its classes, and to do the best work this course should be as much under the control and supervision of the head of the school as the other. Each teacher of a trade should receive as much advice and direction from him as a teacher of a class does.

My idea would be to form all the younger pupils into classes which should be instructed in the use of all the tools, and the peculiarities of all the materials used in every trade taught. I do not mean that I would keep them at it long enough to learn to work rapidly and accurately; but only long enough to learn how to work and what good work is. For instance, it would take but a short time to teach a boy how to sew leather, but long practice to make him a quick and neat workman. To saw out a circle with a compass saw, accurately following the line, and squarely through the material, is an operation requiring considerable skill and practice; but the principles that underlie the work are very simple, and after sawing one or two such circles, a boy whose attention was called to those principles would remember them, and only need practice to gain speed and accuracy. To file a broad piece of metal perfectly flat, and do it rapidly and without continual testing, is one of the hardest tasks a metal fitter has; yet the principle of the thing is very simple, and to file one such piece slowly and carefully would teach it thoroughly.

It should be the object of this preliminary course through all the shops to teach these principles that underlie the use of tools, the peculiarities of the materials used, and the methods of work. When this has been done for all the trades taught in an institution, a boy could select the trade that he wished to follow with some knowledge of what he would have to do in it. Then he could make a more careful study of it, and gain the rapidity and accuracy that mark the perfect

workman by practice on its details. Even in this special training, the principle, that the pupil should spend most of his time on those parts of the work that he knows least about or is least skillful in, which should always be followed, would be very inimical to pecuniary gain. Two years of the preliminary training in all the shops, and two more of this special practice, ought to make a boy a good workman. It is nearly double the time allowed for speaking youth. There would then remain several years in which the pupil could do good work in return for his instruction, and probably he would do more in that time than he does now in seven years under the present method. This would still be a special training for the trade he intended to follow.

In this special training, after the first two years of general training, I should make a great departure from the methods now in use. Children are human, and the same feeling that makes a man working by the piece a much more rapid workman than he who works by the day would have the same effect upon the boy, and rapid workmen are what we want. Let the work be piece-work. If possible, let it be paid for, not what it would be worth in the market, but enough to encourage the boy to try and excel in it. If the institution cannot afford this, let a reward of some sort be held out for rapid work. The greatest trouble with almost all deaf-mute workmen is that they are slow. Is not this directly owing to the present system of spending a certain number of hours in the shop without regard to the amount of work done? The boy who apparently is always at work, though he may potter and dawdle, and not accomplish in a month as much as another does in a week, yet if he does not bother the head of the shop, generally stands as high in his estimation.

It might be a good plan to keep an account with these boys and charge them for the time spent in instructing them, and for spoiled material, deducting it from what they earn. They will, probably, be treated so when at work, and it would have a decided effect in making them careful, and teaching them to judge material.

To teach trades in this way is much more difficult than to allow them to be learned in the old way. It also costs more; but to make workmen, and not things, should be the object of every technical school shop. The old plans turn out a certain amount of finished work, too often of an inferior kind, and a number of workmen hardly up to the standard. It is hoped that the new will make workmen above the average, both in skill and speed.

The teaching in school should be fitted, to some extent, to that in the shop. In the first place, I regard instruction in scale drawing as an absolute essential for success in this kind of teaching. Not only will it be useful in nearly every trade, but in many it is absolutely necessary. Then each trade has to a certain extent a language of its own, and this language should be taught. It would take but a short time, and would help the shop work greatly.

In connection with the shop, if the institution could afford it, I should have a sort of mechanical playhouse, where there should be a lathe, a few jig saws, a set of good tools, and a place for each boy to keep his private property. Here I would give each perfect freedom to follow his own will, except that the tools should be kept in order, and damages to the institution property paid for. Knowing how eagerly many speaking boys take to such pursuits, I have no doubt

that the deaf would also, and I would expect much really good work from this playhouse.

The pupils' library should have some works that would bear directly upon the work of the shops, and on mechanical work in general.

It has always seemed strange to me that none of our institutions give any instruction in metal working. There is no reason why deaf-mutes should not excel at this, and it would open a vast field of labor to them. I have often thought that the larger institutions could teach it with great success. Most of them have a great deal of gas and steamfitting and plumbing to do, and even if they did not, these trades are as easily learned as carpentry and printing. To any wishing to establish such a shop, I suggest that in the manufacture of the ordinary globe valve, they have a field where almost all the operations in brass could be taught on small light work, and the product find ready sale. The outfit would not be very expensive. The material spoiled could be remelted, and the necessity for accuracy is such that it would be a most salutary check on bad workmanship. Should the institution that I have the honor to represent ever be financially able to carry out such an undertaking, I intend to urge the establishment of such a shop upon its Board most strenuously.

DR. GALLAUDET: It is usual for the standing Executive Committee to present a report to the convention of its proceedings from the time of the convention preceding. The Chairman of the Executive Committee presents the following report, which, with your consent, I will now read to the convention.

The standing Executive Committee beg leave to submit the following report of their action since the adjournment of the tenth convention, held at Jacksonville, in August, 1882:

Four meetings of the committee have been held since the summer of 1882—the first at the Institution for the Improved Instruction of Deaf-Mutes, New York City, on the twenty-sixth of June, 1884, at which all the members were present except Dr. MacIntire; the second at the Minnesota School for the Deaf, Faribault, July 11, 1884, at which all the members were present except Miss Rogers; the third at the Institution for the Deaf and Dumb, New York City, December 10, 1885, at which Dr. E. M. Gallaudet, Dr. Peet, and Dr. Gillett were present; and the fourth at Berkeley, California, on July 16, 1886, at which all the members were present except Miss Rogers.

At each meeting of the committee the editor of the "Annals" has presented a report, and his accounts have been audited by the committee and found correct.

At the third meeting the death of Rev. Thomas MacIntire, Ph.D., who had been a member of the committee since 1868, was announced. The committee adopted a minute expressive of their high appreciation of the character and work of Dr. MacIntire, and filled the vacancy occasioned by his death by the election of Mr. J. L. Noyes, of Minnesota.

At the fourth meeting the editor of the "Annals" presented a report of his work since the meeting of the last convention, as follows:

BERKELEY, CALIFORNIA, July 15, 1886.

Dr. E. M. GALLAUDET, *Chairman Executive Committee of the Convention of American Instructors of the Deaf and Dumb:*

I respectfully submit a summary of my receipts and disbursements since the last Convention of American Instructors.

Receipts.

From balance on hand August 26, 1882	\$652 79
From assessments on institutions	6,253 33
From individual subscriptions	762 09
From sale of back volumes and numbers	180 48
From advertisements	61 47
Total	<u>\$7,910 16</u>

Disbursements.

For printing and engraving	\$3,505 08
For salary of editor	1,600 00
For articles of contributors	797 56
For preparation of index	250 00
For postage, expressage, stationery, etc.	313 59
For shelves	10 00
For advertisement	8 00
For traveling expenses	293 80
Balance on hand	1,132 13
Total	<u>\$7,910 16</u>

The annual assessment, at the rate of forty cents a pupil, based on the number of pupils actually present in the institutions on the first of December, 1876, has been paid in full by the following institutions: American, New York, Pennsylvania, Kentucky, Ohio (until December, 1885), Virginia, Indiana, Illinois (since January, 1884), Georgia, South Carolina, Iowa, Mississippi (until December, 1886), Texas, Columbia, California, Kansas, Le Conteulx St. Mary's, New York Improved (until March, 1886), Clarke, Arkansas (since January, 1886), Nebraska, West Virginia, Maryland Colored, St. Joseph's, Colorado, Western Pennsylvania, Western New York, Central New York, Halifax, and Ontario institutions.

The following institutions have paid less than their assessments, receiving a proportionally less number of copies of the "Annals:"

INSTITUTION.	Amount of Annual Assessment.	Amount Paid.
Tennessee	\$42 00	\$30 00
North Carolina	54 80	20 00
Maryland	36 00	25 00
Minnesota	33 60	*20 00

*Since January, 1886.

The Louisiana, Missouri, Wisconsin, Michigan, Alabama, Oregon, New England Industrial, Dakota, New Jersey, Northern New York, and Florida institutions, and the private, denominational, and day schools, have not contributed to the support of the "Annals," except in some cases by subscribing for several copies.

The income of the "Annals" during the past four years has been slightly greater than the expenditure, giving us a balance on hand \$479 greater than four years ago.

The index to the "Annals"—volumes twenty-one to thirty, inclusive—was published soon after the completion of the thirtieth volume, and distributed free of charge to the institutions contributing to the support of the "Annals" and to the subscribers.

I respectfully suggest that the convention be recommended to change the name of their periodical from "American Annals of the Deaf and Dumb" to "American Annals of the Education of the Deaf." This would indicate its real character better than the present title, and would dispense with the unnecessary word "dumb," which is objectionable to many of the parents and friends of the deaf.

Respectfully submitted.

E. A. FAY.

At the fourth meeting of the committee a communication was presented by Miss Rogers, who was unable to be present, from the corporation of the Clarke institution, urging that the words "and dumb" be dropped from the name of the "Annals," and from the title of the convention.

The committee acted favorably on the suggestions of the editor and of Miss Rogers, and now recommend that hereafter the "Annals" be called "The American Annals of the Deaf," and that the convention assume the title of "The Convention of American Instructors of the Deaf."

The Conference of Principles held at Faribault in 1884 appointed a committee to prepare a blank form for the collection of statistics concerning the deaf and dumb. The committee so appointed met at Washington in November, 1884, prepared suitable forms for the collection and preservation of statistics, publishing said forms in the "Annals" for January, 1885. The Committee on Statistics requested the standing Executive Committee to have blank forms printed, which might be furnished to the several institutions at very small cost, and so facilitate the collection and preservation of statistics in a uniform manner. Your committee have authorized the editor of the "Annals" to carry out the suggestion of the Committee on Statistics, provided any considerable number of institutions will indicate a purpose to use the blanks.

This subject is commended to the serious consideration of the convention as one of very great importance, and the committee express the hope that the heads of the several institutions will at an early day accept and act on the recommendations of the Committee on Statistics.

All of which is respectfully submitted. By order of the committee.

E. M. GALLAUDET, Chairman.

BERKELEY, CAL., July 20, 1886.

DR. GALLAUDET: In submitting this report, I will add a single word as to the recommendation of the committee that the name of "The Annals of the Convention" be changed. It is believed that this proposed change will commend itself to every member of the convention. We are very well aware that the pupils for whose interests we are laboring are dumb, in general, because they are deaf; that is, dumb when they come to us; or many of them were. Very many very soon cease to be dumb under the helpful influence of their instructors in speech. It has been found in the experience of many of the officers of the institutions that many persons are made to feel uncomfortable by the use of the word "dumb," applied to deaf children; and that even in some cases the carrying out of laws with relation to the education of the so called deaf and dumb has been involved in difficulty. Children who are deaf but not dumb, but who are fit subjects for education in the schools for the deaf, have sometimes found great difficulty in securing the help which is afforded to those who are said to be deaf and dumb. These suggestions are found to be in the line of a general reformation of names and terms as applied to the people for whom we are working, and even to the schools established for their benefit.

The old question was once raised, "What's in a name? That which we call a rose would smell as sweet by any other name." I believe there is a good deal in a name, and that often much can be done in the way of helping a cause by giving it a correct name. So I trust that this suggestion of the committee may meet the approval of the convention, as well as the other suggestion in regard to the acceptance of the recommendation of the Committee on Statistical Forms.

MR. G. O. FAY: I would move that the report of the Standing Executive Committee, including the other recommendation respecting the change of the title of the "Annals" of our convention, be accepted and adopted; and that the members of said committee be reappointed for four years, or until the session of the next convention.

Dr. Gillett then put the motion to the convention, which was carried unanimously.

MR. J. J. CHICKERING, of Washington, then read the following paper, entitled

PHYSICAL CULTURE.

I do not expect in this paper to offer anything new or original. I merely wish to make a plea for what I consider an especially important part of a liberal education, and one which in this country has been largely overlooked and slighted. To this I will merely add a brief description of the system of physical exercise at present in vogue at the National Deaf-Mute College in Washington. These remarks apply to all educational institutions, and will have especial reference to the deaf and dumb in only a few particulars.

Cicero defines a liberal education as the education of a "liber," or freeman, as distinguished from a slave. An important part of that freeman's education, in the opinion of those old Romans, was a physical development which would enable him to form a part, undergo the hardships, and share in the victories of those legions which for a season overwhelmed the world. In these happier days we are not called on so often to share in the struggles of the empire; but is the struggle for individual existence any less keen than in the times of the Cæsars? Do we not constantly hear of the necessity of straining every nerve in order to keep pace with the times? Do we not see, Americans especially, nervous, eager, anxious; a constant drain, physical and mental, going on all the while? "A sound mind in a sound body" is not a catch phrase in this nineteenth century; it is a *necessity*. And look at our schools and see what a race is coming up to receive the burdens of the present generation! Look at the stooping shoulders, narrow chests, thin arms, and spindle shanks of the rising Americans. Remember the distinguished families which you can recall at this moment, when extraordinary mental vigor, transmitted and refined from generation to generation, with no corresponding increase in physical development, has resulted in *brilliant wrecks*—poor castaways ere the first third of their life's voyage was completed, and the richness of their freight only making more evident the folly of intrusting it to so frail a craft. Build strong this ship and then freight it with what you will.

Were the question put to me: "Why do you consider physical exercise in a gymnasium of *general* importance?" I should reply: "Because it leads to the development of a *symmetrical* body." A perfect man (or woman) is the noblest work of God. I do not consider him a perfect man whose right arm is an inch bigger than his left, whose right shoulder stands higher than its fellow, who with a splendid pair of legs and hips has a narrow chest and stooping shoulders, who with irreproachable chest and lungs must nurse his dyspepsia with stale bread and drugs, who with biceps the size of oranges hasn't strength enough in his triceps to raise his own weight. The Greeks worshiped beauty; and symmetry was with them one of its cardinal principles. Surely in the development of the human form divine

they surpassed the world, and we might safely emulate the creators of an Apollo and a Venus, if only from an artistic standpoint. But beyond this, a *symmetrical* body is the *strongest* body; it can do the most work. If one set of driving wheels on an engine is of poorer material than the other, it will give out sooner, and then, unfortunately, *both* are useless. One-sided work is never the best work; a man naturally uses the stronger of a pair of members; it is easier for him, and he is conscious of doing better work for the time being. But as a result of this, the stronger goes on getting stronger, and the weaker (through lack of use) goes on getting weaker. Finally, the weaker collapses, and then comes the crash of *both*. In symmetrical development we want to check all this.

A great change has come over the methods of gymnastic instruction of late. Such men as MacLane, of England, and Blaikie and Sargent, of America, have, by means of their thorough preparation for their work, and ingenious pulley-weight combinations, created a *science* where before was merely a series of desultory and often misdirected endeavors. By means of their apparatus, almost any set of muscles may be used and developed, while leaving the others almost untouched, and thus weak parts may be built up to that point where they can join the rest in developing the perfect man. Then, too, the using of accumulative sets of weights enables this development to go on gradually and surely, with no overtaking or straining as was formerly the case where the whole weight of the body (one to two hundred pounds) had to be lifted at the very first exercise.

Were I asked why I considered physical exercise in a gymnasium of especial importance in connection with schools and institutions of learning, I should say, first, because it gives brain rest, immediate and sure; second, because it supplies an outlet for superfluous animal spirits.

All work of the body, whether physical or mental, results in the breaking down of countless numbers of cells in the parts used. To supply this waste an increase of blood is demanded in those parts. As the quantity of blood in the body is practically constant, when it is directed in larger quantities to any particular part of the body, the remaining parts receive less, and suffer, for the time being, a loss of vitality. Thus in the case of hard study the brain demands an excess of blood, the small blood vessels become congested, and if the effort be long continued, heaviness and headache result, while the extremities become cold and numb. Now let the student take up some brisk physical exercise; the blood is at once called to this new scene of activity, these parts are flushed, the brain is relieved, and for the time being left almost free to recuperate and rest. *Next to sleep, physical exercise is the best brain rest known!* And right here let me remark that I have observed a tendency on the part of boys to "cut" gymnasium on examination days, on the ground that they had too much to do. I have even known schools where the gymnasium exercises were omitted on examination days, for the same (so called) reason. Those are the very days of all others when, as the brain has been unusually flushed with blood, especial care should be taken to relieve the strain by drawing the blood elsewhere. If you usually exercise half an hour, on examination days exercise an hour.

I suppose it is a well recognized fact that there is in all of us a certain amount of superfluous animal spirits—devilment I have heard it called—which must be worked off somehow, somewhere. I claim

that this gymnasium is a safety-valve for just this peculiarity of this human steam engine. After an hour's work in the gymnasium no boy or man, be he five or twenty-five, cares for further physical disturbance; he wants to be quiet, and welcomes study or rest, as a change. I think the faculty of the National Deaf-Mute College will bear me out in saying that cases of discipline arising, as we might say, from *physical* disturbances, in and about Kendall Green, have diminished marvelously, if they have not indeed entirely ceased, immediately upon and since the completion of the gymnasium and the commencement of exercises therein. That an improved physique usually results in an improved moral nature, I consider a fact too well established to call for discussion.

Our exercises at Washington consist first in running a certain number of times around the gymnasium floor; the run at the beginning of the year is made a quarter of a mile, and later increased to half a mile. This is to set the lungs at work. Care should be taken to have breathing done through the nose, to have the chest thrown out, and to have the steps taken on the toes.

Then follows a dumb-bell exercise with light wooden bells; here the circulation is started, and all the muscles set in working order. Then comes a set of exercises on Dr. Sargent's chest weights, developing all the muscles above the hips, in both trunk and arms. These chest-weight exercises are started with five-pound weights, and increased one and a quarter pounds a month, till most students, by the close of winter, take ten pounds in each box, or even more in the case of the stronger men. The new student is prone to despise the puny five-pound weight, and desires to cram his box with fifteen or twenty pounds of cold iron. Let him; he never does it but once or twice. Experience is a thorough teacher, and three hundred movements make even the grasshopper (of five pounds weight) to become a burden.

These are all the *class* exercises required. The exercises are held one hour a day, four days in the week, six months in the year—from November to April, inclusive. Farther north a month could well be added at each end. It is gratifying to notice that many students feel the need of all the exercise they can get, and appear regularly on the other two days of the week. Also during the fall and late spring months they may be found daily at the exercises, which are no longer required. There is an optional class in club-swinging which practices on alternate gymnasium days. A gymnasium captain is elected yearly from among the seniors, who leads the class exercises, and I am pleased to meet again, at this convention, two who have ably filled that position during their last year in college, and whom I am proud to point to as exponents of what can be done in the way of physical culture at the National Deaf-Mute College. I refer to Mr. Smith, of Faribault, and Mr. Hasinstat, of Jacksonville.

But, in addition, some forty measurements are taken of each man on his entering the gymnasium. These measurements are compared with each other and with the table for the standard man, as given by Sargent and others. Each man then receives a card, recommending to his use certain machines tending to develop those muscles in which he is weak. The regular class exercises occupy about half an hour, and he is expected to occupy the rest of the hour in this special work. The development in college has been very gratifying, and a frequent

question asked me by visitors is: "Are *all* mutes, naturally, such straight, strong, healthy looking men?"

I notice improvement in new men, first, in general bearing and elasticity of step, as well as a new light in what was, at first, sometimes rather a dull eye. I am inclined to think that the deaf and dumb are apt to stoop somewhat, probably from a constant habit of bending forward to see more distinctly in sign and lip reading. I know the the gymnasium at Kendall Green has done much to correct that tendency.

In the matter of lung development, I doubt if sufficient attention has been called to the disadvantage the mute labors under in missing the constant use and consequent strengthening of the lungs and diaphragm in ordinary speaking and singing. The story is told of some famous tenor, that in rehearsing a new score he struck for a high note; it failed to come, and summoning all his strength he essayed a second time; this time it rang out clear and strong, but he felt a sudden weakness in his shoulder. On examination it was found he had broken his own collar-bone in the strain brought to bear on it by the muscles required to hold the chest firmly during this remarkable vocal effort. I cannot vouch for this story, but the mere fact of its being told shows the immense amount of muscular development which must result from our daily speaking and singing. I cannot but believe that a simple exercise which should consist merely in having a class of mute children, several times a day, throw the shoulders back, inflate the lungs, and give utterance to any vocal sound whatever, provided it was given with a will, would be of great advantage in strengthening the lungs and thus more completely purifying the blood and improving the general health.

One trouble which presented itself was to convey the idea of rhythm, and thus enable the students to keep step in marching. A sharp snare drum solved this problem; most could feel the vibration and they carried the others with them by that sympathy which always exists in masses of mankind.

I have upon the board a few samples of gratifying results in both increased size and symmetry, simply to make my meaning clearer. The average chest girth of about fifty young men showed the following gains:

	November.	May.
Inflated .....	.897	.918
Repose .....	.853	.864

The measurements given are decimals of a meter.

The greatest gain in chest girth was:

	November.	May.
Inflated .....	.890	.972
Repose .....	.855	.910

Some interesting cases occurred of the development of limbs into symmetrical proportions where marked discrepancies existed when the first measurements were taken.

A single illustration will be sufficient:

	November.	May.
Right calf .....	.377	.388
Left calf .....	.374	.388
Upper right arm .....	.297	.305
Upper left arm .....	.300	.305

In concluding, I would say: See that your exercises are *regular, methodical, and judicious*.

A small amount of exercise taken *regularly* is worth far more than great exertions made spasmodically. An hour a day, four days in the week, during one's school life, doesn't seem much to give to these bodies of ours, which we all hope to make last through the threescore years and ten allotted to mankind.

Let exercise be *methodical*; don't put any one through an exercise unless he knows what it is for. Any child can be taught anatomy and physiology enough for this. Let him *know* and *see* and *feel* what muscles he is using, and what the effect will be.

Let exercise be *judicious*; use a muscle until it is *tired*, but not until it is *strained*. In the former case *strength* will result; in the latter, *lameness*.

Put in your libraries books on the subject, and start the boys and girls to reading them. Blakie's "How to Get Strong and How to Keep So," "Strong Bodies for Our Boys and Girls," and Sargent's manuals of exercise will be sufficient.

Don't try to raise up gymnasts, but perfected human beings. If any one has a talent for the heavy apparatus, can shine on the parallels, the springboard, the horizontal bar, so much the better; encourage him; it will add interest and be a good thing; but it isn't necessary that a finely formed man or woman should ever even *see* the heavy apparatus. Dexterity on the heavy apparatus is the result rather than the means of physical development.

Above all things, *start in early with this work*. More can be done in one year while a child is growing than in five after he is grown. You can hardly begin too early with the little ones. I will not say, "Give them a dumb-bell for a rattle, and a pulley weight instead of a go-cart;" but I trust you get the idea. Make of them, *not athletes*, but *athletic, strong, symmetrical men and women*.

PROF. E. A. FAY: I should like to bear my testimony as a member of the Faculty of the institution in Washington of the very great benefit which our students have received from the instruction in gymnastics given by Mr. Chickering. We have seen the benefit in the improved health of the pupils, the largely diminished visits of the physician and the consequent reduction of his bills, and in the general good order and good conduct of the students, that superfluous steam which is usually generated among a body of young men being worked off in the gymnasium instead of in the college halls; also in their improved mental bearing. Upon one of our recent presentation days one of our Directors expressed his great surprise at the steady tread and fine manly bearing of our students, and asked us how we could explain it. The explanation was that all of these young men that graduated had had Mr. Chickering's gymnastic training during the whole of their college course, and the effect was evident in their bearing and appearance. There is no department of our college work to which we attach more value than to the gymnastic department.

MR. NOYES: I wish to say here that our experience during the past year, in which we have enjoyed a new gymnasium, is in perfect accord with every point that the writer has made, and with the remarks of the last speaker. I have had nothing that has relieved me so much in the matter of discipline during the past year as the use of the gymnasium. The health of our pupils has also been much improved

by it. We give our girls an opportunity to enjoy the gymnasium as well as the boys.

DR. E. A. FAY: And so do we.

DR. GILLETT: And the experience of the Illinois institution is going to be the same. [Applause.]

The following paper, entitled "Our Institutions as Temporary Homes for the Deaf," was then read by DR. G. O. FAY, of Hartford:

OUR INSTITUTIONS AS TEMPORARY HOMES FOR THE DEAF.

In addition to the work of the school, institutions also provide the various ministry of the well ordered home. Correct personal habits and exemplary morals, social refinements and services of worship, wholesome recreations, hospital care, and dietary regulations; a discipline elastic, as gentle as the feeblest, yet sufficiently resolute to control the most sturdy; a spirit of liberty united with equitable system; an eye seeing everything and nothing; a supervising energy that shall rid the administration of idleness, vice, and presumption; a harmonizing power that shall cause the general current to set one way without eddies, frost, or division; a commanding superiority of character that shall attract rather than enforce—these and other desirable conditions are to be provided, if brick walls are to be quickened into a living, a real institution. The parent, who has never allowed his child to sleep away from the parental roof a night, intrusts to the institution the child's whole life, substantially, for ten years, and those the most plastic. How confiding the trust! How serious the responsibility!

An institution is more likely to flourish where the authority of the school and of the household rests in the same person. Singleness, directness, and symmetry of management can be best secured by the employment, in judicious division and gradation, of a sufficient staff of assistants. Independent departments, not necessarily inharmonious, frequently are so. The importance of high character and of ability, of technical education and of easy social facility, at the head of the educational department, is generally conceded. The domestic department, even when independent, does not always fare as well. And yet personal qualities, equally high, have full scope in the management of its various affairs. The educating influence of the eighteen hours spent daily in the domestic department is as important as that of the six spent in the school-room five days of the week. The purchase and use of supplies, the keeping of accounts, the repair of buildings, and the care of stock, important and indispensable, are not so important as the ability to mingle socially, controllingly, with the children themselves. Good business qualities do not necessarily qualify an officer to be the head of a family of young people, from two hundred to five hundred in number, all using habitually a language with which he may be wholly unacquainted, and to learn which he may be too old, too busy, or entirely indifferent.

Institutions should be as large as is consistent with thorough control. Several small schools are likely to be, each of them, inferior in quality to the same united. They are, separate, the ungraded, poorly equipped, rudely taught schools of sparsely settled districts as compared with the cultivated schools of populous centers. They are the cobbler's shop of the cross-roads as compared with the factory, the machine shop, of the city. A degree of concentration in any art is

favorable, is essential, to its best development. The best pantomime, the best equipments, the best classification, the best instruction, the best body of opinion, sentiment, and character, will be found in the larger schools, when well administered. A school of two hundred will produce better results than any smaller. When mutual acquaintance is becoming slight, when executive energy fails to reach and to harmonize details, when neglect, abuse, or misconduct can exist for prolonged periods unnoticed or concealed, when the necessary daily tactics of the household are burdensome and oppressive, then, and not till then, has the institution passed the true limit of its population, and aggregation has become an evil. Deaf children cannot be sorted out and locked away, indefinitely, in wards, like insane patients and criminals. General assemblage for various purposes and free social circulation must and should frequently occur throughout the day.

The sexes will be present at all institutions in the ratio of three males to two females—a fact not inconsistent with equality of the sexes at home. This curious inequality in number results from a degree of popular indifference to female education, the greater sensitiveness of the sex itself, and a greater parental solicitude for the security of daughters away from home. This proportion in demand can be relied upon in the construction of buildings.

The officers and employés of an institution are emphatically, more than books, the educating world of the pupil. They should possess the best personal qualities of the best homes. They should be safe, agreeable, profitable associates for the pupils out of school as well as in it. A certain degree of association with the humblest employé is inevitable, nor is it altogether undesirable. It should be of a useful, never of a corrupting, or of a merely negative character. The possibility of neglect, abuse, and injury in any case, and their occasional occurrence to a shocking extent, suggest the need of the utmost care in appointments, as well as of sleepless vigilance in subsequent oversight. The institution, like the home, embraces the interior life, the confidential experience of many persons. Its officers should be faithful to its domestic characteristics, and refrain, when justice, delicacy, and charity forbid, from the public exposure or rude exhibition of its intimate events and incidents, however innocent or trivial. Such honor, scrupulous and discreet, will promote confidence and coöperation between parents and officers. Happy is the institution whose officers, of either sex, deserve such trust!

The appointing power in our country is, in fact, too often heedlessly indifferent to the qualifications and conduct of appointees. Some executive officers, at the time of their appointment, know nothing of, and some even thereafter care to know nothing of, the natural language of the deaf. Physicians and supervisors are often appointed or removed upon the exigencies of national and State politics. Stewardships, family superintendencies, and matronships are doled out as rewards by the secret service or pension departments of political parties. Our parties should insist upon the best administration, and do well to depute the authority to secure it to trusted, reliable men of their own faith. Mixed boards may be unmixed evils. Trustees of any faith prostitute their trust, however, when they bond the appointments which they control in payment of political debts, or when they use the educational interests of the deaf, and the

care of them, as political capital mainly. The people have not established these institutions, and do not now support them at heavy cost, with a view to providing temporary homes for intriguing or starving partisans. The people did not build them to be converted into party ambulances.

Institution life should be organized with leading reference to the welfare of the pupils themselves. In the appropriation of rooms, the arrangement of school hours, the assignment of housework, the consumption of supplies, the general use of the premises, large opportunity exists for officers to provide for themselves first, and incidentally for pupils. This is not parental; it is simply and only mercenary. Evils of this nature have led, sometimes, to the exclusion of the domestic life of all adults, or of as many as possible, from the institution building. Social privation is the chief calamity of the deaf, and should be alleviated by every reasonable expedient. Properly regulated and pervaded by a generous devotion to the welfare and progress of the pupils, the incidental society of as many adults as possible—at any rate, of teachers and employes—is beneficial, and should be recognized, encouraged, and regulated by careful provision and privilege. A spirit of generous interest in the deaf will also protect the duller, perhaps uninteresting, pupils from premature dismissal. Pupils should not be left to suffer from delayed promotions and hasty removals in the interest or at the caprice of ambitious or impatient teachers. Institutions should not be administered primarily for the comfort of a staff of officers, or chiefly in behalf of the brighter and more attractive children.

Institutions having the whole care of children between the years of ten and twenty—children with whom communication will always be especially difficult—owe them an industrial training. The combination of this with school work has resulted widely in the enforcement of work hours in the morning and in the afternoon of each day. The full employment of the foreman, in itself desirable, has tended to an undue extension of the daily time of the pupil. Of late, and, as a remedy for obvious effects, two rotating systems have been put into operation. By one, pupils attend school half a day, and work the other half. By the other, pupils attend school two thirds of the day, and work one third. This latter proportion is preferable, because sufficient. The pupil becomes reasonably proficient in his trade, and has more time for school work. The urgent, predominant importance of this with the deaf is felt keenly by the older classes, and by the better scholars. Those trades are indicated which, other things being equal, require the least social cooperation. Shoemaking, carpentry, tailoring, printing, gardening, and the arts of design, have proved most satisfactory.

Day schools for the deaf are sustained in some of our large cities. The public is relieved from the support and care of the pupil out of school hours; and the prolonged, painful separation of parent from pupil, incidental to institution life, is escaped. Day scholars, however excellent their instruction may be, do not advance so rapidly as institution scholars. Home life—which at the outset could, confessedly, do little or nothing toward their education—does but little more at a later period. Home life means far less, educationally, to the deaf than it does to the hearing. Deaf children at home measurably stagnate or drift. The devoted mother, the faithful sister, the attentive brother, willing to be the constant literary companion of the one deaf mem-

ber of the household, are rarely met with. In the busy life of the family, the deaf one, at any age, is left to himself, not exactly intentionally, perhaps unavoidably. Affection is lavished, but literary companionship is omitted. Like the frog in the well, the school of the day is severely taxed to make up for the night's decline. The plea that such pupils practice at home what they learn at school is largely contradicted by their experience.

Should institutions for the deaf have a cottage or a unitary character? Each system of construction has characteristic advantages. With the deaf, the great importance of intelligent society, a condition to be scrupulously fostered, and the necessity for unusual attention to details in administration, turn the scale in favor of the unitary plan. Very satisfactory models of institution buildings now exist in the country. Size, the shifting tenure of service, the ignorance of employ  s, accidents, and, most important, incendiary attempts, not infrequently occurring, indicate the undoubted wisdom of building fireproof.

A notion has prevailed that institutions for the deaf are unnecessarily large, and their normal number of pupils is by some compared unfavorably with the capacity of the hospitals for the insane. The deaf require superficial space for the whole number in a dining-room, in dormitories, in sitting-rooms, in school-rooms, in an assembly-room, and in play-rooms. Other rooms are also needed for the convenient and successful management of a large household. Each pupil should have a single bed and a single desk in both study and school-room, with large leeway. The style of support should be inviting to the better class of citizens, and will, of course, be acceptable to the poorer. There should be no disposition, under the pretext of economy, to run it down to a pauper basis. Such parsimony will work a blight. The grounds should be, for suitable recreation and ornament, twenty-five acres in extent. If the buildings are fireproof, and then only, they need not be contiguous to a large town or city.

But the details of philosophy, of school methods, and of administrative management, with all occurring cautions and precautions, are endless. Institutions for the deaf, to deserve the name, must embrace and provide for the whole daily life of the pupil, from seed to fruit, in widest circle. The best elements of the home, of the school, of every department of human life, should be so gathered, combined, and administered as to promote, in the period of his youth, his highest educational well-being, and so to qualify him, the peer of the hearing, to discharge with pleasure and honor the full functions of an American citizen. The State, the nation, as well as corporations municipal, and those charitable, composed of private citizens, among all their various trusts, assume no one of greater delicacy, difficulty, importance, or promise. Theirs is the privilege, receiving the full light of the past and acting up to the opportunities of the present, to lay foundations that will not crumble beneath the wiser building of the future.

THE CHAIRMAN: These four papers are now before the convention for discussion.

HON. ERASTUS BROOKS: I would like to say a word or two upon these subjects. In the first place I regard the subject of mechanical education as the one great leading subject of the country. If there is to be an end to the agitations which disturb our country from one extreme to the other, the element for the mending of the present

disastrous state of things is to be found, in my judgment, in the mechanical education of the pupils in the several institutions of the country.

I need not say to an intelligent audience like this what transpires almost every day in the year; how labor and capital are in constant conflict; what a disturbance there is in everything which relates to labor, and to almost every department of labor; what bloody conflicts have occurred in the great cities of the Union; how many thousands and tens of thousands of people are idle; how everywhere the community is agitated and disturbed as almost never before, in regard to the labor of the country. Here in California in regard to the Chinese, and elsewhere in regard to the large importations from abroad of thousands and tens of thousands of people who undertake to control the capital and regulate the labor of the country.

In the olden time, within my memory and the memory of some present, it was the rule to employ apprentices to serve, not as in England for the long term of seven years, but to have an actual apprenticeship by the consent of the parent, the guardian, and employer. That custom has all gone. Boys who learn trades, while learning them are not satisfied; they stay a little while with the employer and then strike out for themselves long before the age of twenty-one, claiming all of the emoluments and immunities which belong to the man who has served his long term of apprenticeship. One consequence of this is the almost total abolition of what is called the apprentice system.

Now I desire to say a word in regard to the division of labor, so called. In my judgment, in an institution like this, Mr. President, or like the one that I in part represent here, it is possible, without interfering with any educational duty whatever, to make a man or a woman qualified for self support when they leave the institutions with which they are connected.

In our institution we make as perfect a printer as the graduate from any of the newspaper offices of the country. We print our annual reports. We have asked the Legislature of the State to pay us as much for the type setting and piece work which belongs to the printing of the "Annual Report" as the Public Printer would receive if the work was done by him.

We make carpenters who are qualified for employment when they leave the institution. We have qualified men to teach carpenters and joiners and cabinet makers; farmers qualified to take care of the grounds and produce what is necessary in the protection and improvement of the lands allotted to them.

We have engaged, as you have heard this morning in the paper read here, in the art department, and in the future of that art department, to provide employment for hundreds who in the future will graduate from that institution. And I recommend this most heartily to every institution. Why? In the first place, among the people at large there is a sympathy with those who are unfortunate enough to be deaf. In the next place, a deaf pupil may be just as well qualified to make a good drawing, a good picture, or a good painting as a miscellaneous class of people who do not belong to these institutions. And hence the importance in regard to art and in regard to mechanics, not only in institutions for the instruction of the deaf, but in all of the institutions of the country for qualifying those who are pupils in any school, for the future occupations of life.

The Superintendent of this institution was pleased to make some allusion to President White, of the Cornell University, of which I was a Trustee. There we do more in regard to mechanical education than anything else. One of our liberal citizens has given \$150,000 for teaching the students their mechanical work.

One of the great improvements of our own time is in what is called polytechnic education, in which pupils are directed, under the wise advice of parents and directors. And let me say this for the encouragement of others: that we have never graduated a boy from the Cornell University, or the mechanical department of that institution, whose services have not been sought for long before the time of his graduation. And when, in an institution like this, and kindred institutions, you are able to say, "Here, at least, is the beginning of a good carpenter, a good joiner, a good printer, or a good artist, its future is as certain wherever material support is necessary, as that day follows night. [Applause.]

THE CHAIRMAN: I find in the question box the following question, "Can a teacher do good work for eight hours a day?" and will request Professor Clark, of Arkansas, to reply.

MR. CLARK: There are several points to be considered in answering that question. My friend, Mr. Brooks, for whom I have the greatest respect and reverence, a few days ago drew our attention to the old fashioned school teacher of many years ago. That brought up to my mind the idea of a man, sitting in a chair, calling up the spelling class and giving it the words, and so forth. I don't see any reason why a man cannot do that sort of teaching as long as he can keep awake; I would not say eight hours, but all the rest of his time between his eating and sleeping, and a little exercise, he can devote to that kind of teaching. But I know of no man that I can think of that can teach as I require my teachers in Arkansas to teach for eight hours a day. There may be some such men, but I do not know them. In the course of my life I have tried many different occupations. I have stood guard duty four hours on and four hours off during a month at a time; I have been in the saddle from sunrise until long after sunset; and, if you can call it work, I have followed a dog, with a gun, as long as I could see to shoot, and I never in all my life felt so utterly used up as at the end of eight hours teaching after the first week or two of a session. I do not think that any man or woman can do good, conscientious work in the school-room for eight hours.

Dr. Peet, in his paper the other day, explained their system of instruction in New York. He said the teacher *sits* in a chair, calls up a pupil, and tells him to write an exercise upon the slate. That system was not in vogue in New York when I taught there. I think I could teach eight hours that way. [Laughter and applause.]

DR. PEET: I think the remarks of the last speaker call for a reply. The teacher who has succeeded him has worked as hard, as constantly, vigorously, and successfully, as he himself did in the previous year. And the sitting of a teacher in our institution, when he is getting out every single particle of work, and when every nerve of the teacher is strained, and when he is taking the whole magnetism out of himself and putting it in his pupils, is not ordinary sitting. The pupil comes up and answers the question; the teacher's whole thought is concentrated upon him, and the teacher sits, perhaps, in order not to obstruct the view of his pupils. Standing is not work. The

imparting of the nervous energy and of the whole mind and putting it into the pupil is work. [Applause.]

MR. J. A. KENNEDY, of Illinois: There are different ways of looking at this subject. We change our classes every hour, and do not keep the same class all day. If we did, I think it would be a rather long day's work. Every hour we bring in a new class, which is resting to us. I think I prefer that to keeping one class. I had rather teach eight hours with that variety or change than to teach the same class for five hours. The teachers in our institution are also exempt from the slavish monitor duty at night. I had rather teach two hours in school than to take charge of the boys in their study at night. We are exempt from Sunday teaching, also, more than teachers are in other institutions, perhaps. In this way I can stand seven or eight hours' work as well as I used to five.

MR. NOYES: Can the pupils stand eight hours work every day?

THE CHAIRMAN: I have never had any observation in that.

HON. ERASTUS BROOKS: The pupils in our institution never spend eight hours a day in brain education; nor do I think they do in any other. They may spend four of it in the mechanical department, or two of it. The idea has been well expressed by the last speaker here, that we should give a variety during these eight hours of occupation. That variety may relieve both teacher and pupil, and in a well conducted institution it does relieve both.

MR. JAMES DENISON, of Washington (a deaf-mute): Two or three years ago I visited the New York institution, and in their school-room every teacher assured me that he found eight hours work too much; that he could not do eight hours continuous work and do it well.

THE CHAIRMAN: The next question in the question box is, "How can institution papers best help in the education of the deaf?"

MR. ELY: Everything helps in the education of the deaf that promotes their home life in the institution; their social, moral, and religious life. The institution papers should be in careful hands. It is one of the teachers of the institution; and as Dr. Fay once well remarked in speaking upon this subject, there is probably no teacher in the institution who has more influence than a well conducted paper published by the institution, which is read by the pupils. In the first place I would be very careful to tell what it should not be; I would be very careful that the paper should not deal too much in gossip; and I would be very careful that the home life is not invaded by the paper which is published. I would not rule out all personal matters, for children are interested in items about the people whom they meet every day and whom they know. They may be trifling to other persons, but they are of considerable importance to them, and may be a help in inducing them to read the paper. I would make very careful selections, to suit them to the intelligent pupil. We have quite a number of pupils, and to help them to read we must prepare matter for them, either selected or written; and it is an excellent way for the teacher of the institution to write short articles in language which they know better than anybody is best suited to the pupil.

Then I would have short stories, written by the pupils, occasionally published, after being corrected by the teacher, as an encouragement and reward to them. Then I would bring the paper into the school-room, and teach the pupils there how to read it; I would take it into the youngest class capable of reading short sentences, and have them

read and give the meaning of the paragraphs, and so in the older classes.

THE CHAIRMAN: The next question is referred to Dr. Gillett, and is as follows: "Are two heads ever beneficial to an institution?"

I have no hesitation in saying *never*. It is contrary to human nature. When two generals are best for an army, when two captains are best for a man-of-war, then, perhaps, we may say that two heads are best for an institution. That experiment has been tried all over this country, pretty nearly—certainly all over the East and Mississippi Valley; and as far as my information goes, it has been a failure in every case, and will be, I believe, until the advent of the millenium.

I know that my honorable and respected friend here, Mr. Brooks, the other day mentioned that in the New York institution they had two heads, and that he was satisfied with it. But he perhaps does not know as well as some of us know how there are little birds flying from institution to institution; and I have no doubt that if the officers of the New York institution were all present, and we could place them on the witness stand under oath, they would show a different state of affairs than that which he supposes to exist in that institution. [Applause.] If they did not, I would fall back on the fact which I believe to be true, that New York is the exception, and is the only place on this footstool of our heavenly Father where the people have sufficient of divine grace to enable them to do their work and exist in that way. [Laughter and applause.]

HON. ERASTUS BROOKS: Right here I may say a word in defense of myself. It has been a maxim of mine as far back as I can remember that "All of nature's differences make all nature's peace."

I want to say in regard to the Institution for the Deaf and Dumb in that city, that we have tried one-man power; and we have tried what my friend chooses to call the two-man power. A one-man power in our institution takes entire control of the educational department and everything which belongs to it. He is the Principal of the institution; and that is work enough for one man in an institution like that. The Superintendent, as I said the other day, takes charge of the material things. He buys what is necessary, he sells what is necessary, he looks after the farm and all produce whatsoever, and he takes charge of the boys and girls when they are out of the educational department. The two departments are entirely distinct. This enables the Principal to give his whole time to the education of the pupils. And it enables the Superintendent to give his whole time to the material business, and things which belong to the institution. The two things in my judgment are as the poles are apart. Now I shall accept the conclusion of my friend that, as we are eminently successful in the management of our institution, we have, by the blessing of God, that divine grace which enables us to do our work in that way. [Applause.]

DR. GALLAUDET: The other day, when Mr. Brooks was telling us about the management of the New York institution, he entered a saving clause, in my judgment. In speaking of this arrangement, and how well it worked, he said, "or the head of the domestic department might be subordinate to and governed by the head of the institution." There we have our idea.

During the last few months I have looked over papers relating to the very early history of the oldest institution in this country; and if I could relate to you what I have there found, proving what a bane

it is to have two independent heads in an institution, you would be surer than ever of the existence of that special Providence which has enabled the New York institution to go on under such a state of things. [Laughter.] In my reading and my experience I am satisfied of nothing more absolutely than I am of the fact that in regard to the management of an institution like those that are organized as deaf-mute schools in this country, the old saying of "where two ride the same horse, one must ride forwards," holds good. There should be, in my judgment, as a rule—although there may be these most benign exceptions once in a thousand years—one head to an institution; and where that head, presiding over the school operations as well as over the other operations of the institution, has the hearty coöperation and assistance of an able man who will assume the charge of the domestic department, a second head of the institution in all of its management, then I think, Mr. President, we may say we have an ideal management of the institution. But other than that, as a Director, as a member of the Legislature, or in any capacity where I should give my vote or my voice in determining the character of the management of an institution, I should certainly never dare to run the risk of the lightning striking twice upon this planet as it has struck in New York City. [Applause.]

THE CHAIRMAN: The next question in the question box is: "How much attention should be given to physical culture in our institutions?" This is referred to Mr. Chickering.

MR. J. W. CHICKERING, of Washington: The same time I spoke of as used in Washington; an hour a day in four days in the week. It has not been considered wise there to put in a certain time every day of the week, as the whole idea of the gymnasium was not to place anything irksome upon the boys. If they understood that at a certain time they must come to work at their exercises, they would not enjoy them. It was found that four times a week, an hour a day, or in the case of the young pupils half an hour a day, was not only wise, but necessary by many of the boys, as was shown by their going in after the month during which the regular gymnastic exercises took place. And there are some who prefer even to take those extra two days. But I think that in the colleges of the land where such exercises are carried on regularly, that an hour a day four days in the week is the usual limit assigned for class exercise.

I should say the proper time to take these exercises is after eating; and I think as near as possible after the mental labors of the day were over, so as to allow plenty of time to recover from the effect of the exercise before the evening meal. If the exercises of the school close at three o'clock, I say this exercise should commence at half-past three, if they have an hour after; if they have not half an hour before their meal, they should take this exercise as soon as possible after mental effort.

MR. NOYES: We have found it beneficial for them to take these exercises immediately after their study hour in the evening, before the pupils retire. We have but a single hour in the evening after study, at eight o'clock, and the boys have at least half an hour before retiring. I have found that to be a very convenient hour for gymnastic exercises.

MR. J. W. CHICKERING: I should consider that as an excellent idea, and in institutions where that would be convenient as probably the

best hour. In our institution the pupils sometimes wish to use their evenings for other purposes, and are not able to take their time.

THE CHAIRMAN: The next question is: "Has not the time come for 'The Annals' to be published oftener than once in three months? Could arrangements be made to have this periodical issued each month in the school year? This would increase its usefulness, and at the same time increase the interest in an exchange of ideas among instructors." This is referred to Prof. E. A. Fay, of Washington.

PROFESSOR FAY: I think that is a question that does not belong to the editor of "The Annals," or to any one, but to the convention itself.

THE CHAIRMAN: That is referred to the Executive Committee, or to the convention itself.

Here the convention adjourned until to-morrow, July twenty-first, at two o'clock P. M.

NORMAL DEPARTMENT, WEDNESDAY, JULY 21, 1886.

MORNING SESSION.

The Chairman, Mr. Ely, called the meeting to order.

Rev. Mr. McFarland offered the prayer.

THE CHAIRMAN: In the work of the oral section yesterday we were in the midst of a very interesting discussion when the hour for adjournment came. Therefore, we have taken up this oral question this morning.

Miss Richards desires me to say that she would like it if any persons have any questions to ask, or any suggestions to make in regard to what was presented yesterday in her paper, or the remarks that followed, that they would ask them now; and that the discussion may be carried on from that point.

MR. MATHIESON: I would like Miss Richards to explain how she conducts the breathing exercises which she referred to yesterday.

MISS RICHARDS: I spoke of giving the children, when they first came to me, exercises in breathing. We know that pupils sometimes breathe very irregularly, letting the breath pass through the nose and mouth at the same time, and breathing very shortly, frequently inhaling it slowly, and expelling it very quickly. I have each child come to me, and if it breathes through the nostrils in articulating, I take hold of the nose in this manner, and have the child inhale the breath as strongly as it can. Of course, it cannot inhale it strongly at first, and then have it exhale it through the mouth. Of course, a child cannot breathe forcibly at first, but in doing that, in closing the nasal passage and inhaling the breath, when the breath is expelled, the soft palate rises, and in that way is formed the habit of sending the breath through the mouth. I know that in ordinary breathing we should breathe through the nose, but to form the habit of sending the tones through the mouth without nasality, I give this exercise, and I give it for three months regularly, three times a day; after that but once or twice a day.

MISS TRUE: Do you help the children to observe the motions of the soft palate by the use of a looking-glass?

MISS RICHARDS: Yes. I have them observe the movements of the palate by a looking-glass, and also have the children look into each other's mouths. I want to impress it forcibly upon their minds that the soft palate must be kept raised, in order to have a clear tone and to avoid nasality.

MISS TRUE: How do you correct audible breathing?

MISS RICHARDS: I do not know that I ever had any to correct. How do you correct it?

MISS TRUE: I have not corrected it yet.

MR. A. S. CLARK: In teaching the letter "s," suppose the child persistently says "sh." How do you correct that?

MISS RICHARDS: I teach it first to bring the lips straight across the teeth. In "sh" the lips must be spouted. If I give "s" with the lips drawn tightly across the teeth, as in long "e," it will give a clear "s." I will change the lips after giving "s" for a time to spouting "sh," just by bringing the lips forward to give that sound.

MISS TRUE: I would like to ask if you do not find some children give the "s" much better with the tip of the tongue resting on the upper teeth than placing the tongue by the lower teeth?

MISS RICHARDS: I have never found it so. I have found that I get a better "s" by placing the tongue against the under teeth.

MISS TRUE: I find very often, where that is impossible, that I can get a very presentable "s" by placing the tongue just back of the upper teeth, and developing it from "th."

MISS RICHARDS: Professor Bell gives the position for "s" with the tongue right back of the upper gum. I think Miss Worcester, of Northampton, tells us that she gives "s," usually, with the tongue against the under teeth.

MR. ELMENDORF: I beg to differ entirely with Miss Richards upon the "sh" sound. A child can give the "s" as well with the lips in one position as in another. I have found that that makes very little difference. The whole difficulty is in the position of the tongue. If they allow any portion of the tongue to touch the roof of the mouth, and allow the little opening, which is necessary to form the "s," just back of the lower or the upper teeth, I do not care which they do; because I find that children sometimes get the "s" better with the tongue up, and sometimes down. Nevertheless, I do not compel the child to put the tongue up to say "s." If I find the child can say "s" perfectly with the tongue down, is not that sufficient? Therefore, I let the child say "s" in the way it can get it most perfectly. When they give the sound of "sh" for "s," it is because they do not curve the end of the tongue up and permit the breath to pass through the opening in the center. The moment that the middle of the tongue is raised too high it throws the end of the tongue down and the sound of "sh" is formed. [Showing.]

MISS RICHARDS: I noticed when Mr. Elmendorf was giving that sound, that he brought his lips into action, and gave the spouting of the lips very forcibly.

MR. ELMENDORF: But you did not get the "sh" sound.

MISS RICHARDS: I know that the position of the lips is changed and also the tongue.

MR. ELMENDORF: I do not say that the position of the lips is not changed in the "s" and "sh" sound, but I hold that the "sh" sound does not come from the lips.

MR. PORTER: I would suggest that, as mouths are not all shaped

alike, that the "s," in some mouths may be made better in one way, and in other mouths in another way. It can be made in both ways, and the shape of the arch of the hard palate is very different in different mouths, in some mouths it being nearly flat. And the shape of the teeth is different, as well as the size. All of those things make a difference, I should think, in regard to the manner of forming the "s." I think it is well known that ordinary speaking persons make it in different ways; some with the tongue high up on the palate, and others with the tongue below the lower teeth. I should think that the different forms of mouths should be taken into consideration.

MISS TRUE: The position of the tongue in "sh" being concealed, how do you give the child an idea of the position?

MISS RICHARDS: I have never had to give a child an idea of the position of the tongue. I give them the "s," placing their hand before my mouth while I make the sound. Before doing this I have given them a looking-glass, and taught them to hold their tongues down. I use the manipulator very little; I give these drills with the mirror, just to enable the child to get control over the tongue; and then, by holding the tongue down and letting the breath pass through the teeth, I get the sound of "s." If they can do that the other way, and without any extra drilling, I take it and am perfectly willing to. Then, if I can get the sound of "sh" in the same way, I get it; and if I cannot, I wait until I can get it. I do not direct their attention to the position of the tongue with "sh," because it is so concealed that you can hardly show its position. But I will say that I have seldom had trouble with "sh."

MISS TRUE: I always do. I very often have them give the long sound of "e," which raises the top of the tongue; and then, by placing a string across the tongue, asking them to give "s," lifting the top of the tongue and also elongating the center of the tongue—with a little practice I get a very good "s."

MISS RICHARDS: In what way do you have trouble with "sh"?

MISS TRUE: It is more apt to be "s."

MR. ELMENDORF: I have tried both of these ways; but sometimes even these will fail with "s." Another way to get it every time is, as I have learned from experience with a child I have taught in our school for three years, to have the pupil put the tongue right between the teeth, and then draw it straight back up against the teeth, and taking an ordinary toothpick, put it in between the teeth, and then the child brings the tongue up; and you can get a perfect "s" in that way every time. They cannot help making the "s" perfect. I object to any mechanical means whatever, as a rule; but it is necessary in this case, holding the tongue in the center, and it gives the "s" perfectly. The child will feel a peculiar tickling sensation at the end of the tongue. The child I first tried this with has been in school seven years, and she now gives the "s" perfectly. Put the tongue between the teeth first, and then put the toothpick right between the teeth, and tell them to put their tongue up in the position for "t." They get their tongue up, and then they make the "s."

MISS TRUE: I do it very often by having them give the "h" non-vocally, and bringing the tongue up, keeping the breath going all the time.

MR. ELMENDORF: As this seems to be one of the mistakes of our deaf-mutes, and there are a number here that are not so very well acquainted with mistakes and how to correct them, I will state that

the most common mistake is on our vowel sound of "a" which is the compound sound of "ah" and "e." The vanishing "e" is very difficult for deaf-mutes, not only to get but to remember. I never yet have heard a deaf mute give that vanishing "e" properly. They can do it if you call their attention to it. Take the word "lady," and they say "lahdy," and "pah" for "pie." That is a very common mistake, and the children's attention should be called to the fact that it is "pie," and "nice," and so forth. I have heard that mistake with a great number of children; it is one of the commonest mistakes, and cannot be corrected too soon.

Another mistake is vocalizing consonants that should not be vocalized. This is a common mistake of deaf-mute articulation.

"Greenberger's Word Method" overcomes that to a great extent. I have heard better word speaking in the last three years in our school than ever before. I do not advocate that word method; I am rather undecided upon the subject; but it certainly does result in overcoming these compound sounds, vocalizing consonants which ought not to be vocalized. In correcting that I should simply impress upon the child that the "pl" must be formed against the back of the mouth; that the mouth must be in the position to pronounce the "l" the moment it has pronounced the "p." The position for the "l" must come almost exactly at the same instant the "p" is formed. I show him that I do not say "pulay," but that it is "play." And the child soon understands that there is no vocalization. I always use words which come right in front of the mouth to show these things at first, and in that way the child overcomes that difficulty to a great extent. I have some pupils in the class that very rarely make that mistake; and if they do they are very much ashamed of themselves. They allow their organs to fall back to their natural position before they form the next consonant.

Yesterday Miss Richards spoke of writing the word upon the slate, so that they could have a written picture of all their words. I differ with her there, because I prefer to have the picture on my lips—to have them know the picture of all the words that they know upon my lips, not in writing or in spelling, because that simply increases their lip reading to a marvelous extent. If they have the writing upon the slate they will take some from the lips, but they prefer to have a lasting picture, and they will try to think of it as it is written; whereas if they do not have them written they must think of it from the lips, and it makes their lip reading very much quicker and more rapid. I hold that that is the reason I can speak to my children exactly as I am speaking to you; and upon all occasions I do so. I have had visitors come to my class who say that I talk to them exactly as I do to the children. I consider it a very high compliment to me, and I consider it a high compliment to the children that they are able to read the lips in that way. And I hold it is simply because they have nothing to fall back upon, as the words that they learn are not written. To teach the word "accident," for instance: I will go around the class listening, never looking at the children, because I might read their lips and they might deceive me. I listen to see how it sounds. Sometimes I send them across the room and let them speak. After they have that word, do I write it on the slate to show them how it is spelled? Not at all. They would get the word picture on the slate. But if I do not do that they get the word picture on my lips when I speak it. I do not approve of writing at all.

Some lady has asked me since I have been here, "Suppose you cannot get a sound, will you keep right at it?" No, not at all. If I try the child with a sound or word, and the child at the moment has the slightest fatigue, I drop it entirely and go to something else, because it is simply a disastrous thing to tire a child with anything, because that will be the end of them for a long time. I drop the attempt to get that sound entirely, and make no mention of it for a day or two, and bring it up again casually, and very often the thing I have been striving for and almost given up comes with the asking. Do not think you are going to fail if you cannot get something upon your first or second trial. Drop it and go on with something else, and afterwards come back to it again.

MR. WALKER: A deaf-mute present suggests to me that the most difficulty she has ever experienced in articulation is the combination "ch," or "tsh."

MISS BLACK: I do not know that I ever had very much trouble with "ch." Pupils can give that explosive by placing the tongue in the right position and expelling the breath on the back of the hand. I have had more trouble with the "k" sound than any other consonant. I have a little pupil in school who had a vocabulary of, I think, fifty-two words, and nearly all the elements and many of the combinations, before she could give the "k" and, of course, the hard "g" sounds correctly. One morning she came in with her face perfectly radiant, and the first thing she did after saying good morning, was to sound the "k." She repeated "k-k-k," and was greatly pleased to feel that she had succeeded in getting it.

MISS FISH: A child will often get the sound of "ch" from imitation. If it does not, I wait until it gets the most of the other sounds, and then teach it as "tsh."

MR. ELMENDORF: I have found that in doing that they are very apt to give the sound "tush." But if you get them to put the tongue back further, and still save the "t," they cannot help giving it correctly.

MR. WALKER: Would not they be more likely to give the sound of "sh" than "ch" when the tongue is put back in the center?

MR. ELMENDORF: No, sir; because I say the "t," and they can get the "sh" sound and the "t" separate, and then I put them together.

MISS RICHARDS: I would like to speak of the difficulties of combining "pl" and "tl" that Mr. Elmendorf spoke of. I have had trouble with pupils, but not recently, because I give these vocal gymnastics for a long time before the children begin to speak. I teach the elements and then combine them. Before they know or have any idea of what they are doing, I take a looking-glass and give to each of them a looking-glass, and we go through these exercises, and in pronouncing the sound "pr," for instance, I tell them to put their tongue against the upper gum and keep it there, and then to say "pr," "pr," "pr," not removing the tongue at all. And they never know that they can mistake. They never know that they can say "per" at all, and I teach "tl" in the same way. The "t" is made with the tongue broad, and I tell them to just narrow the tongue. They do not know what they are saying, or what is coming at all, but they get a perfect "tl," or a perfect "pl," and then I write it for them, "tl," and tell them it is that, and they are sure of it. The class that I have now, I think never have made a mistake in giving it "par." I cannot remember one. I just have them glide from one sound to

the other, and that continuation in that way they get simply, easily, and naturally.

MR. WALKER: Then you teach those elements along with other elements?

MISS RICHARDS: Yes, sir; the combinations "sk," "sm," and every combination that I can think of, I teach before giving it in a word.

MISS ELLEN BARTON: I think the position of the consonants should be taken before the voice is developed at all.

MISS RICHARDS: Yes, I think so. For instance, take the sound "pl." The tongue should be closed against the upper teeth before any sound or voice is given.

MR. PORTER: Can you not direct them to put the tongue in the position for "l" before they utter the "p."

MISS RICHARDS: I do that always.

MR. MATHIESON: I would like to ask whether a knowledge of the sign language, and a knowledge of the manual alphabet would not be of great benefit in the articulation work?

MISS RICHARDS: I think a knowledge of the sign language and articulation would harm no one, if he did not use them. You can know the signs without using them.

MR. MATHIESON: And in your work when you know a sign, do you hesitate to give it, in order to get at the result?

MISS RICHARDS: I think that, knowing the signs, you can understand children and their wants very much quicker. And very often, if a child forgets the word, for instance, if it has a whole sentence excepting one word, and cannot get that, if I can give the child a sign to make him think of that word, I give it.

MR. MATHIESON: That is the whole thing. I am glad we are so agreed. I thought when Mr. Elmendorf mentioned this morning that in teaching the word "accident" to his pupils, he did not write the word on the board, how could he explain it, except with the lips? The thought struck me how would the child know what "accident" meant if the boy knows nothing about signs? If we could explain in signs what "accident" meant, that boy would have a clearer conception. I would like Mr. Elmendorf to explain that a little more fully.

MR. ELMENDORF: Signs are not at all necessary for that explanation. I say to the child, "Did you ever see a horse-car run off a track and hurt somebody?" or, "Did you ever see a horse run away and hurt somebody?" The child might say yes, and I say that would be an accident. I say that to them just as I talk it to you, and they understand every word of it; and they will write it in their journals the next day.

MR. WALKER: How long will that child have to be in school?

MR. ELMENDORF: About five years. "Accident" is not one of the first words taught, although I should teach it if necessary.

MISS FISH: I will ask Miss Richards how she teaches the combinations of "r;" how she teaches "dr," or "tr." I have found more trouble with those combinations than with any others.

MISS RICHARDS: I will ask Miss Barton to answer that question.

MISS ELLEN BARTON: With the "tr," I should in most cases induce the children, if possible, to leave the voice out entirely. As "t" and "r" the voice would come in on the following consonant. There are so many difficulties that I hardly know to what difficulties Miss Fish alludes.

MISS FISH: The combination of "d" and "r."

MISS RICHARDS: If a child gives a good "tr," I do not trouble myself about the "dr." They will get that after a time. If it gets a good "d" it will afterwards get a good "dr."

THE CHAIRMAN: We will now go to the subject of "lip reading." Miss Fish, I think, is ready to give a brief statement of how she conducts the exercises.

MISS FISH: I consider the subject of lip reading very important, and I teach it sometimes ahead of articulation. I intend that a child shall read words from the lips before it can speak well. In teaching I have many different devices. One plan I tried last year successfully, was to have each child take its slate, and I would give a list of independent words, that had no connection with each other. I found that in that way they improved very much, and that it was of very great help to them. Then I went on reading "do," "is," "it," and, perhaps, "strawberry," "Ely," etc., and they would get, perhaps, one hundred words in half an hour in that way. That was one exercise I had in lip reading.

MISS RICHARDS: Do you have your pupils write the elements before they begin writing words?

MISS FISH: Yes, they take all the elements from my lips.

MISS RICHARDS: Do you combine the elements before reading the words?

MISS FISH: Yes, they take parts of words and syllables from my lips.

MISS RICHARDS: And then, after that, do you give them short words, and then longer and more difficult words?

MISS FISH: Yes; although I often find that longer words are more easily taken from the lips than the shorter words.

MISS BLACK: I do not understand why lip reading and articulation are classed as two subjects. When we say articulation we include lip reading; we mean to cover the whole ground. The two are so closely connected that it seems to me we have little occasion to speak of them separately. The congenitally deaf cannot learn to articulate without lip reading.

DR. GILLET: If that is true, why is it that some persons articulate quite well who do not read lips well.

MISS BLACK: I think this is seldom true of the congenitally or totally deaf. Nearly all of those deaf people who talk well and do not read lips well became deaf after they had learned to talk, or are not totally deaf. We have some good lip readers who are not good articulators. But the congenitally and totally deaf are obliged to learn lip reading in the first place. They are obliged to learn articulation by sight; they cannot get it from hearing. It is true that there are some exercises in school, that are called lip reading exercises, and we have others called articulation exercises, but the two are usually carried right along together.

DR. GILLET: I would like to ask Miss Sparrow's opinion upon that subject.

MISS SPARROW, of Massachusetts: I think we should make a distinction between articulation and lip reading. We have more difficulty with those who are poor lip readers than with others, and we find that we need special exercises to develop lip reading.

MISS BLACK: That is very true; we have some that have never forgotten how to talk, and they come to us to learn lip reading. There are others that become very hard of hearing late in life, and learn lip

reading to assist their poor hearing. In such cases we of course make a specialty of speech reading, or lip reading.

DR. GILLETT: With congenital mutes, what is your observation as to the distinction between the two?

MISS BLACK: The congenitally, especially those who are totally, deaf make the best lip readers. With those who hear a little, the practice of speech reading is like trying to do two things at once. We depend a little upon hearing, and try to watch the lips at the same time. I have had a pupil, a business man, forty-seven years of age, who had become gradually deaf, and now is very deaf. He came from a distant western city, for the purpose of taking lessons in lip reading, to assist him in the practice of his profession of law. At the end of six weeks he attended service on the Sabbath. He sat quite near the pulpit, and he afterwards said to me that he did not think he had lost one sentence of the sermon. He said: "I do not think I have heard more than about one third; the rest I obtained from lip reading. That was the benefit of it to him. He used to test himself by holding his head down so that he could not see. I commenced with him by not using my voice at all; talking simply by the movement of the lips, confining the exercise entirely to that; just as we do in school with pupils who have some hearing, almost always speaking in very low tones when addressing them. We do not care about training their ears so much just at this time. After some proficiency in speech reading has been obtained, it seems best to gradually fall into the ordinary conversational tones; but I have had them tell me that it was much more difficult to read the lips when some sounds or words could be heard.

MR. I. N. TAIT, of Missouri: I desire to ask how you succeed in teaching congenital and semi-mutes? Which is the more rapid, and which the more satisfactory? I refer to both lip reading and articulation.

MISS BLACK: I would have to make a difference there. The congenitally and totally deaf make the best lip readers every time and learn it more quickly, other things being equal. Those that have once talked or have some hearing, be it ever so slight, have pleasanter toned voices; and enunciate more readily, but often more carelessly.

DR. GILLETT: Have you never met some congenitally deaf persons who spoke well, and yet did not read lips very well?

MISS BLACK: Yes, sir; I have met with a very few. It is said by many persons that speech reading is a gift, and cannot be cultivated to any great extent; that it is not so much a matter of cultivation, as a special gift. It is to some a natural gift, as many other accomplishments are. Some persons are naturally much more minute observers than others, but that does not prevent the obtaining of a great deal by cultivation. If one has the natural gift so much the better. If not, one can still obtain a certain proficiency without it.

A MEMBER: Did you ever see a congenitally deaf-mute that could not be taught articulation?

MISS BLACK: No, sir; I have not. Of course we are not now considering those that have defective sight, and those that are deficient in mental capacity.

MR. CROUTER: I would like to have Miss Sparrow give an explanation of Miss Worcester's method of teaching vocal physiology, as I think her's is a very satisfactory method.

MISS SPARROW: I think that is too important to be explained with-

out preparation. In a hasty explanation I should be liable to make mistakes. I should like to call attention to a paper which Miss Worcester has published in the January number of the "Annals" for 1885. In that paper a chart is given, and some explanation of it, but not just what you desire. The title of the paper is, "How shall our children be taught to pronounce the written words of the English language?" I think that chart and explanation would be of great help to many who are not acquainted with her teaching.

DR. E. A. FAY: Miss Worcester has promised to develop that subject further in the "Annals."

MISS RICHARDS: I desire to ask Miss Sparrow what special drill she has to develop lip reading.

MISS SPARROW: We have at times such exercises as these: We take a great variety of words, or combinations of words, which the child does not know, and give them rapidly, and the children compete to see who will read the words correctly and write them on a slate. We do not depend upon the child's pronunciation of it, as, the pronunciation being imperfect, we are not sure that they understand it. In reading exercises, I always take two, three, and sometimes four sounds in contrast.

MR. WALKER: I would ask how many you have in a lip reading class, and in what manner you give the whole class exercises; that is, when you are teaching one child a difficult word, what are the other pupils doing; do they take part in the exercises, or are they left idle?

MISS SPARROW: There is a great variety of ways in doing that. We have half an hour in all the classes, in which the teacher goes to Miss Worcester's class-room, and work is done with Miss Worcester and the teacher of the class, so that one half of the class will be occupied with Miss Worcester, and the other half with the regular teacher. Eleven is the largest class which I have had; but fourteen, I think, have been taught successfully; that is, with a great measure of success.

MR. WALKER: That would give seven to the teacher in the special drill. The number that we prefer is ten in the other exercises. In the articulation exercises we keep the children at work oftentimes in pronouncing the list of words which he has already made; pronouncing them over and over again to himself.

MISS RICHARDS: I will ask Miss Sparrow if the teacher gives her own lip reading exercises, or if Miss Worcester during the special drill gives lip reading exercises?

MISS SPARROW: Each teacher gives her own. The time of Miss Worcester is too valuable to be spent in lip reading.

MR. WALKER: In giving a class the lip reading exercise, supposing one pupil cannot understand the motion of your lips, must you stop and pay attention to that one pupil, and is the time lost upon the others?

MISS SPARROW: No, sir; we do not stop to give attention to one. It is a rapid exercise, and the children who do not get it try harder next time. It is not worth while to stop for one child. That is the way I do.

MR. ELMENDORF: I would like to state that every teacher in our school must be an articulation teacher. From the first day a child enters the school until the day it leaves it must be under the instruction of an articulation teacher. We have new teachers who must be trained, and are under supervision; but they have to teach articula-

tion, every one of them. Our classes range from twelve to seventeen, I am sorry to say. Everything in the school is done by lip reading, and everything is done in articulation. The children stand in front of the teacher, and the teacher speaks a word, and if the children do not get it it is spoken again. If any child does not get it I stop the drill once or twice for that child, but it would not be fair to the majority to stop too long with one child. I stop as long as I think it is fair for that one child—as long as I think it is fair to the others. If the child does not get it then, I bring it up at some other time. Every lesson is given in articulation, even in the reading hour in that way, and if there is any correction it is given. Everything is a means to an end, and that end is speech and lip reading.

MISS ELLEN BARTON: I would like to say that in any exercise which is for lip reading purely I had as soon teach twenty-five children as five.

MR. WILLIAMS: Would you have larger classes in lip reading than you would in articulation?

MISS BARTON: Decidedly.

MR. WILLIAMS: What number do you consider one teacher can profitably teach articulation?

MISS BARTON: One pupil.

MR. WILLIAMS: I understand Mr. Elmendorf that articulation and lip reading were in every exercise in school. But I would like to ask if he does not have a time when the special thing is articulation, or is lip reading?

MR. ELMENDORF: There are several times. There come five or six times a day, five or ten minutes at a time, when specially difficult words are articulated for the children. Suppose it is grammar, or reading, or language, or any other lesson; there are a few minutes taken out of that lesson to teach the difficult words that have been mispronounced. And this is done all of the way through the school day, up to the highest class. In history I will take five or ten minutes from that lesson to give them a few words which they do not understand, or do not articulate or pronounce well.

MR. WALKER: I would be very glad to hear how Miss Barton conducts her lip reading class of twenty-five.

MISS BARTON: That would depend entirely on the age of the pupils. If it were simple exercises with young children I should have a great number of sentences, words, and elements written upon a slate. I would have some one child find a sentence and give it; and if the child upon the floor failed to do it, I would allow another to give it as quickly as possible, and so keep up a feeling of competition between them. In the older classes I would do it in very much the same way, though perhaps they might be reading from my lips instead of hunting for it on my slate. Working on the wall slate one child works at a time; but the twenty-five are at work as much as the others.

DR. PEET: I would like to ask of some of these ladies and gentlemen, who have been teaching articulation, whether they have ever found any benefit from Mr. Lee's method of designating letters, in primers. You know that he puts, in special print, silent letters, long and short vowels, etc. I would like to know if those books have been used at all as reading books in teaching articulation.

MISS BARTON: We have not used them as much as we intend to in the future. I like the principle.

MR. F. D. CLARK: I would like to ask Miss Sparrow if she would

give us some little explanation of the elementary system. It is a system toward which I think I am tending, and I am very much interested in it. I would like a sketch of the first few months of a child's instruction.

MISS SPARROW: I do not teach the youngest class, and I have only had the practice that comes in taking classes from the youngest up, and correcting their errors of speech, of articulation, and other work.

THE CHAIRMAN: The next subject to be considered is history. And the proceedings will be conducted by Mr. G. B. Goodall, of the California institution.

MR. GOODALL then read the following paper:

HOW TO TEACH HISTORY.

Mr. President, ladies, and gentlemen: When this convention met I had no expectation of taking any active part in it, but for reasons best known to the courteous committee, I have been asked to strike the tonic chord of to-day's topic, and then let the more experienced and better prepared execute the symphony. Having had barely time to write down my own thoughts, I have not been able to fortify myself with reference to authorities, so what I have to say will be simply the expression of my own ideas, right or wrong. I must, therefore, beg you to be content with a few assertions, which may be enough to provoke discussion, but which, in this paper, I cannot adequately support. But I am sure there are several gentlemen present, with experience in their practice, and literature in their pockets, sufficient to set me right if I am in error.

I believe that history is a very important part of education, and that the idea, entertained by some, that it can be learned at any time and in any manner, is erroneous. No matter what the profession is, other things being equal, the one who is well versed in history will be the better man. Education does not consist in learning to do one or two things, but in developing, forming, and shaping the mind; and, though history may not add largely to our knowledge in the direction of our special life-work, it stimulates thought and broadens our intellectual range in a manner that no other study can.

There is no doubt that most children hate history, and as little doubt that they have reason to hate it, when we examine the textbooks and the manner in which it is generally taught. Undoubtedly there are teachers who are not following in the old rut, but, having solved the problem in their own minds, are quietly pursuing better methods. Think of Bancroft, Knight, Gibbon, Hume, Motley, and a host of others! If to gain a knowledge of history is to learn what they all contain, then indeed is it a task that well may appall a child. But children ought not to hate history, for history is a series of tales about human beings, and human beings is the theme which the child likes best. What child will not listen attentively to a well told tale? Some may say that children like fiction better than fact, but I doubt it. Tell a child a story, and when you have done tell him that it all really happened, and observe now pleased he will be and how eagerly he will ask questions about it. Tell him another, and, having done, tell him it is not true, and note his disgust. You will thus see that children prefer fact to fiction. How often we hear a child say, "Please tell me a true story!" Make history as attractive as a novel or a newspaper, and children will pursue it with the same zest. Since we have

now shown that history is an important study, and that children's repugnance to it may be changed, by judicious methods, to a love for it, we will next try to explain how it should be undertaken.

It seems to me that in the study of history there are four periods to be considered which correspond to the four phases under which the subject may be regarded. We may think of history as the life and doings of a nation, as biography is the story of an individual's life; and as the life of an individual is made up of a few important acts and crises united with much that is less important, so the history of a nation is composed of important events and epochs scattered along the more uneventful plane of its life. This is the *Story* view of history.

Again, these events may be regarded as strategic points, or joints in the skeleton of history, and arranged in chronological order, often have little connection with those which stand beside them, except in point of time. But as a frame, or skeleton, is necessary to every substantial structure, so is this order necessary as a groundwork of historical study. This may be termed the *Strategic* or *Skeleton* view.

We see again that events of like character occur at different times. Take the agrarian legislation of Tiberius Gracchus, for example. In studying history this seems out of place. It is unlike anything that stands near it, before or after. It is a land question, and as such, is as modern as Home Rule, and might be grouped with all land questions, ancient or modern. With this view the facts of history may be paragraphed, as it were, and studied in groups. This may be termed the *Group* view.

Fourthly, a deeper and more philosophic consideration will lead to tracing out the development of the spiritual and social relations of human beings in society. If there were no growth there could be no history, for there would be no change, and history is only a record of mutation. But there is a growth that is unseen, except in its effect upon society. There is a development which cannot be seen by the eye; it is immaterial. If every material development of these United States could be ground to powder in a moment, and its people remain unharmed, there would still live the grand ideas of liberty, religion, and economy which have been developed during the past century. This may be called the *Spiritual*, *Social*, or *Philosophic* view.

Thus, you see, I would plow this historic field four times, and each time I would plow it for a single purpose corresponding to one of these four divisions which I have given. Naturally we should have four courses, going over the same ground, and which might be called *Story Course*, the *Strategic* or *Skeleton Course*, the *Group Course*, and the *Philosophic Course*. I do not mean the materialistic form of philosophic history which is in vogue, and which I do not believe, for it seems to me that other factors besides matter and motion enter this great product.

Spencer says, "There can be no correct idea of a part without a correct idea of the correlative whole." This may be generally true, but we certainly can learn some of the individual facts before we can comprehend a series. I would proceed from the individual to the general, that is, I would study general history last. As many pupils cannot study more than the history of their own country, this seems to me to be the history to begin with. General history is often given next, but it is hard for the pupil to follow so many threads at once, and confusion and discouragement is the usual result. It better be

studied after the imagination and the memory have been trained by stories and chronology. The history of the United States being finished, let that of England and perhaps of France be followed out. Of course, details depend upon the extent of the work that can be done, but I would put United States, English, and ancient history before general history. Let us ask what a pupil needs most. If he has little time and cannot do all that is desirable, without doubt the events of the past one hundred years are the most important to him. So much as to the *order*, and we come to the *method* of study.

In a school, in connection with other studies, instruction in history may be begun at the age of nine, and in some cases earlier. I say instruction advisedly; I do not mean *study*. The child now enters upon the *story course*. A mother teaches the stories of Joseph and Samuel to the great interest and delight of the child; and the stories of Captain John Smith and Luther can be as easily taught. There are but two requisites of success: the teacher must himself *know the story well*, and he must *have the ability to tell it* so as to excite interest. In speaking schools, I have met with better success in this than in any other way. The teacher must prepare himself, and these histories that are so much like arithmetics, will be of no use here. This course is largely biographical—a series of stories about the important characters, to quicken the imagination and store the mind with incidents and associations that will make a lasting impression upon it. There is no necessity of place or order in learning these stories; their arrangement will come in the skeleton course. I should say that two years, and, perhaps, more, might be spent in this manner. This knowledge is gained without taxing the strength or wearying the attention of the pupil, and is a source of recreation and pleasure.

At eleven or twelve the pupil can receive more substantial food. He is old enough now to understand some of the relations of cause and effect. He has had the story of the Boston "tea party," now he can have the affair at Bunker Hill. A pamphlet should be made by the teacher, to assist in recalling what he has been taught. Some dates must be memorized, and the order of events must be observed. All of the pupil's knowledge must come from the teacher. It should not be forgotten that three fourths of the time spent in learning, or trying to learn, a hard lesson, is thrown away. The rest may be spent to *some* purpose, but the victim sticks at hard sentences, talks, and thinks how his club will defeat the Kick-hard Club at the next game of football. The system here proposed does not leave the pupil to his own thoughts. It takes hold of him, and sets him at work in the right direction. In this manner two or three years may be employed.

The pupil, now fourteen or fifteen years of age, may enter upon the group course, and, with the aid of various books of reference, *study* all topics that belong to the same group, stand where they may chronologically. Here the first *study* begins, and if the previous work has been well done, this course will be most interesting and profitable.

Of the fourth, or philosophic course, nothing need be said, except that it should be pursued in the same manner as the third course, with the aid of books of reference, each topic being worked out separately.

In all this work, the aim should be to kill two birds with one stone. Of course, the work in all these forms is to be written, corrected, and copied with the greatest care. Attention to paragraphing, punctua-

tion, and other matters pertaining to thorough instruction in English, will thus be most effectively taught.

I believe in accurate work. One can endure being called narrow-minded because he insists upon a comma being a comma, if he has some object in view, and knows clearly what it is. This so called secondary education has an all-important effect upon the higher education, and if accuracy is not learned when young, it never will be learned. Inaccuracy may be tolerated, but it should be deprecated in the great affairs of life, and is ill suited to ordinary business. If words are to be written, they should be correctly spelled; and if sentences are to be constructed, they should be properly punctuated. To this rule there should be no exception. If a thing is worth doing at all, it is worth doing well.

MR. GOODALL: I have done some of this work in my room during the past year, but not with pupils who have taken the courses that I have suggested, in this order. It is a miscellaneous class. I propose to read to you one sentence from six books, which sentence, expressed in six different ways, is supposed to convey the same idea. This will show you how the work is done. The writers of these sentences are, three of them, semi-mutes, and three congenital mutes.

MR. G. O. FAY: What is the standing of the class; how many years?

MR. GOODALL: They are from fourteen to eighteen years old, and they have been in school, some of them five years, some seven, and some eight. The subject was "The Mound Builders." We have no text-book which contains anything about it. What the class have written was taken from my telling them a story, simply, and these were not written down on the day on which I gave it. I told it to them in signs, and if I used any words which they did not understand, I explained. Of course, the whole subject is written upon, but I will only read one sentence to show you that it is the deaf-mutes' own work. I have not corrected it so as to make first class English of it, by any means, but I have corrected it so that it is fairly intelligible.

I will first read the sentences of three congenital mutes. The idea is that a nation lived here before the Indians lived here:

"Before the Indians lived in the country which is now called America, a race of people, about whom we know very little, inhabited it."

"A great many years ago a race of people lived in this country, which is now called America, before the Indians, who were living here when it was discovered by Columbus."

"Long before the Indians began to inhabit the country of America, a race of people, of whom we know very little, lived here."

* "Long before America was discovered, and before the Indians inhabited the country, there dwelt in this country a race of people."

"A long time ago, before this country which is called America was inhabited by the Indians, a race of people were living in it."

"Many years ago there lived a race of people in this country before the Indians inhabited it, and before America was discovered by Columbus."

So, each sentence, containing the same idea, will probably be a little different in the whole twelve who compose the class.

DR. PEET: How did you give this information? By spelling, writing, or by signs?

MR. GOODALL: In all three: I conveyed it to them as best I could.

MR. WEED: Is that an ungraded class?

MR. GOODALL: It is not a strictly graded class; the class was graded by ages more than by knowledge.

MR. WEED: Have those particular sentences been corrected in any degree?

MR. GOODALL: They were first written upon a slate, or upon common paper, and read, and if there was any expression in them which would lead them to be misunderstood, I corrected them just enough to make them intelligible. I have not tried to make them perfect by any means. This is not a daily exercise, but three times a week, and we do not devote any other time to the study of history.

MR. MARSHALL: Do you use any text-books in the advanced division?

MR. GOODALL: For the last two courses, when they study what I have termed here in my paper the grouping form, or the philosophical form, of it, I use all of the books I can; but for the story course, and the skeleton course, no books. The teacher furnishes all of the information.

MR. MARSHALL: Do you aim to make your lesson on history also a lesson in language?

MR. GOODALL: Yes, sir; we try to kill two birds with one stone.

MR. CROUTER: Do you teach all of your lessons in this way—in signs, and in writing, and in spelling?

MR. GOODALL: Yes, sir.

MR. WILLIAMS: I believe you said that in the first division you would begin with children eight or nine years of age. Did you mean deaf-mute children at that age?

MR. GOODALL: Yes, sir.

MR. WILLIAMS: As soon as they enter school do you begin the historical studies?

MR. GOODALL: The children enter this institution at the age of six, and they have been in school then about three years.

MR. WILLIAMS: You would occupy about three years with the first division, and about two or three with the second division, about the same length of time with the third, and so with the fourth. That would make ten or twelve years of history.

MR. GOODALL: Yes, sir; but only in connection with other studies, twice a week.

MR. WILLIAMS: How would you manage in case you could keep children but six or eight years in school?

MR. GOODALL: I would begin just the same, and let them study those courses as far as they could, because it will do them more good than it will to take an extensive course which is mixed up and which is very imperfectly learned.

DR. PEET: I will ask if in the instruction in this institution it is usual for the teacher to take a class and to teach it everything, or whether the same class comes under several teachers during the day? Do you in teaching history, for instance, teach several grades or classes, or do you confine yourself to one grade?

MR. GOODALL: I confine myself to one grade. The pupils remain in a certain room or class until they are supposed to have advanced far enough to pass into another room.

MR. McDERMID, of Iowa: I would ask your method of making corrections; whether you correct the papers or lessons yourself and have

the pupils copy them in their books, or point out the mistakes and have them make the corrections?

MR. GOODALL: If a boy has presented a page of what I have given him, I first pass along the line at the left margin, and make a cross opposite each line which contains a mistake, and give it to him. He reads and corrects it if possible. I then see that there are some words which he cannot correct, and perhaps I underline them, or I tell him that such a sentence contains the wrong idea. If he has said that Columbus sailed across the Pacific Ocean, I tell him that cannot be; that is all I tell him, and he immediately sits down and perhaps corrects his mistake at once. I try to have a pupil correct everything he possibly can, and those he cannot correct I help him at.

MR. METCALF: I would ask Mr. Goodall, in an institution where the course was limited to eight years, how many years of that time he would devote to the study of history; or if he would devote as many years as he has indicated?

MR. GOODALL: I would teach history during all of that time, from the time he was capable of taking it, to the end. But I would limit the amount of time given each week, to suit my own purposes. There need not be more than one lesson a week if the studies are crowded.

MR. WHITE: How do your pupils in history recite? Do you require them to commit the lessons to memory, and write them out in full the next morning?

MR. GOODALL: In teaching history in this form, the only way that they recite is, to present their papers. I review occasionally, by asking them some question, such as "Tell me something about the mound builders," and they will go and write out what they know about it. There is no time spent in oral recitations.

MR. BOOTH: Do you never write lessons for them? Do they commit their own lessons virtually, by reviewing them and reading them over as you have corrected them; or do you go through with them, and write them out complete lessons for them to memorize?

MR. GOODALL: I never write out complete lessons. Sometimes, if the subject is a little difficult, and they find difficulty in expressing it, I give them one, or perhaps two or three different ways of doing it; then I erase it, and have them express it in several ways. And perhaps they come up with a way which is entirely different from what I have given them.

MR. J. A. McCLURE, of Nebraska: What do you say for having it for an evening study.

MR. GOODALL: I would not give this lesson for an evening study, because it would not be well done. I prefer to have pupils write it in the class-room before me.

MR. BOOTH: In what way do you give language lessons correctly, if not in history?

MR. GOODALL: I do correct the language of the lessons in history. As I have an advanced class, I am not really teaching language by itself. I am only using the history as a means of advancing them in their language.

MR. TAIT: Do you ever find it profitable to have lessons recited topically; that is, to give a lesson to-day, and require the pupils tomorrow to come up and state the topic of the lesson, as nearly as the signs will admit?

MR. GOODALL: Sometimes, after a month's study I have called up

the pupils and asked them to give me such and such topics, and they have given them before the class.

MR. TAIT: Do you find that that gives them a very comprehensive view?

MR. GOODALL: Yes, sir.

MR. TAIT: Do you ever have your pupils recite wholly by means of the manual alphabet, and without any writing?

MR. GOODALL: I have done so; some lessons.

MR. TAIT: If a pupil answers your question correctly, and another one says he knows a different answer to it, and he supplies an answer in almost the same language, do you give the second pupil credit for an original answer?

MR. GOODALL: I do, and I find it an excellent drill.

MR. TAIT: Do you find that, when a class is a little inattentive, to call upon the whole class for an answer, word for word, is a profitable exercise, and secures better attention than any other?

MR. GOODALL: I have not practiced that, but I always have some means of getting the attention of my pupils, if possible. I would say here that I disbelieve in class teaching. There is but one way to teach, and that is one teacher to one pupil, and the nearer I can bring my class work to that individual work, I believe the better work I can do. Dr. Franklin said, "One boy is a boy, two boys half a boy, and three boys no boy at all."

DR. LATHAM: I understand you commence this course at an early period, say two or three years.

MR. GOODALL: Yes, sir.

DR. LATHAM: What knowledge of geography have they at that time? If you speak of America what do they know of it?

MR. GOODALL: I do not care about their knowing when or where this story occurred. They commence their geography in the second course, which I call the skeleton course.

DR. LATHAM: But you are teaching this story before they have a knowledge of geography, without which the story is of no advantage.

MR. GOODALL: I exclude that. The first course of two or three years I regard as simply a course to put into their minds a few facts independent of geography.

DR. LATHAM: I do not believe in that. I think they ought to know geography first, and they ought not to take up the study of history until they have a complete knowledge of geography, or sufficient for the history of the country which they are studying. For instance, what use is there in studying the history of the United States if they know nothing of the geography of the United States?

MR. GOODALL: Most children who learn the stories of the Bible on their mother's knee know nothing of the land in which those things occurred.

DR. LATHAM: It has been the custom for forty years or more to teach geography before history, it being considered that a pretty fair knowledge of geography is necessary to the proper study of history. I know that some teachers write out sketches according to your description, and tell stories. But as a matter of history I think they have no real value at all, until they can locate the events and the people who are concerned in history. Therefore I think that the study of history should not be undertaken before the fifth or sixth year, and that antecedent to that they should have a complete knowledge of geography.

MR. GOODALL: That knowledge, it seems to me, will be in its proper place in the second course I suggest, in which I begin to place dates and places, and so arrange my whole skeleton. Then I begin to clothe it with those stories which they had learned long before. I put them then in their proper place.

A MEMBER: What lessons do you give your pupils in language?

MR. GOODALL: I am obliged to give them some lessons to commit to memory, but I do not believe that it is right. I believe that the physiological method of teaching is almost wholly overlooked. To commit a page to memory is the hardest work that I can do. Many teachers give the pupil a lesson to be committed to memory, at night, when the pupil is less able to do it than in any part of the day. I never give a pupil a lesson to commit to memory at night, if I can avoid it.

MR. McDERMID: I would like to ask, in the use of text-books, what methods you use in explaining a new lesson?

MR. GOODALL: I do not use text-books in a class-room. I would send them to the library to find the facts, after giving them a hint of where they would find them. I would let them find them themselves, and write out what they get on paper, and present it to me. They have an exercise in English, and in history, and I would correct in that way. They have then reached a point where they can begin to help themselves. This is study. All that has been before has been given by the teacher; it is not study, it is instruction.

MR. WILLIAMS: How do you accustom them to the use of text-books?

MR. GOODALL: I tell them that, for instance, the battle of Bunker Hill is described in certain books, and I let them go and read about it.

MR. WILLIAMS: In what period of your course is that? In the skeleton?

MR. GOODALL: No, sir; I would have that in the second course. I do not use text-books until they have studied from four to six years, and have been in school eight or nine years. Everything that they do in history is written out, like English composition. And I make them correct it themselves, if possible, and then copy it carefully into their books, like a composition.

MR. WILLIAMS: Do you find that deaf-mutes are at that age able to get any help or instruction from the text-books, when you get to that point, to go to the library and select the books for themselves, after you have given them an indication as to what the books are, to go to those books, and hunt up the subjects that you wish them to look up?

MR. GOODALL: Yes, sir; I find so in every case; that boys thirteen or fourteen years old can do that. He may do it imperfectly, at first, and give you a very poor exercise several times, but you will find that he will be able to do it very shortly, and you will be surprised to see how well he will hunt up and develop a subject for himself, after two or three months. And that I consider is one of the great things to be taught, how to get things from books.

MR. WILLIAMS: I think that is the most important thing you can teach; for if they are going to improve afterwards, it must be through books. But the question, in my mind, was whether it was not necessary to use books more in the class-room, to teach them how to use them there, in order that they should get that knowledge and be able to use books freely after they get through school.

DR. PEET: Mr. Williams loses sight of the fact that these, after all, are quite young. The children here begin at the age of six, and when they have been here eight years, they are fourteen years old—younger than most of the children at our institutions at that time. And perhaps, in the life of a deaf-mute, fourteen years would be about as young as you would expect them to use books freely.

MR. WILLIAMS: Yes, sir; fully as young. But the question was, how they could jump right into the books at once, without help.

MR. BOOTH: Up to this point, until they use text-books, and until they are put into their hands, do you observe, in giving them lessons, the chronological order of events, in any way?

MR. GOODALL: In the first, the story course, I would tell them the story of John Smith, and that it happened in the early years of the history of this country. I would tell them how General Putnam rode down the stone steps, and that that occurred much later. And, as Mr. Latham suggests, I might tell them something about where it occurred; but I would not insist upon it. The object now is not that. But in the second course, I would give, as I say, certain dates here and there, and begin to clothe my skeleton with the stories which I had given them, and to locate them.

MR. BOOTH: As to dates, do you not find that your pupils learn dates very readily, and yet show evidences at times that they do not understand what dates mean? That is, the occurrence of events relative to one another in time? That they will get George Washington before John Smith, and Abraham Lincoln before John Adams? That they will show that they do not know that one event is past or future, as relative to another?

MR. GOODALL: Yes, sir. But I often have some means of showing the relation of those things. What you say is true, of course. We shall meet with all these difficulties. But a date here and there is necessary.

MRS. MARWEDEL, of San Francisco: I am sometimes asked how we impress our children with the facts of history, in the kindergarten. For instance, taking the people who lived in this country before we came here, we show them a picture of the Indians, show them the tools they use, and give them a description of their past and present life. Then the children draw. We have had children six years of age who have drawn all of the implements and weapons used by the Indians. Then we make them out of mud or adobe, and we build them of little sticks, just imitating the Indians. Then, finally, we use the center table, and we form out of the sand, hills and rivers, and give them an idea of the country in which those people live. That is the first start; and the same thing is represented in stories.

Professor Preyer, professor of psychology and physiology in Germany, has published a work which I am about to translate, which gives the subject wonderful interest to the mind of the child, and the child works it out himself. And I think the teachers of the deaf and dumb know the value of this by experience, that what the child can develop by his own mental activity is never forgotten.

DR. PEET: What is the title of the book that you mention.

MRS. MARWEDEL: The author of the book which I am translating is Prof. W. Preyer. The title of my book will be "Childhood's Poetry in the Study of Life and Forms of Nature." And with it will be connected a drawing book.

MR. METCALF: I cannot agree with Mr. Goodall in all that he has

said in regard to the teaching of history. I do not think you should begin the teaching of history until the fifth year. In our State pupils are only admitted at ten years of age, and I think the first years of their lives should be given to the teaching of language; and that you cannot begin teaching history before the fifth year, and then cannot give more than two years to that subject, for more important matters should be taken up.

MR. GOODALL: I make the teaching of history a language study all of the time.

MRS. MARWEDEL: We have found the historical pictures published by Brown most valuable in teaching history, and other subjects. They are very interesting. They show the pictures of the birds and animals of the different countries, so that you see the wild animal just where it lives, surrounded either by mountains or water, and then the name of the country is marked upon them.

MR. MARSHALL: I have tried various methods of teaching history, and while I agree with Mr. Goodall in many respects in regard to his manner of teaching, I agree with him entirely in the early stages of his teaching—that is, by telling stories, by eliciting the attention of the young pupils, and by having them try to write out in their own words the facts given. But as the class advances in history I think it is well to have well prepared text-books to assist in the teaching. I am very careful in my selection of text-books. I do not depend upon the same text-book entirely. I give lessons from signs and from the board. And I do think it is much better for the advanced classes in history to have some text-book where the facts of the lesson can be presented succinctly, and found easily. If you send a class to the library to find certain facts which are trifling in themselves, but essential for the instruction of the class, you lose time, and the pupils become absolutely discouraged. But with a text-book they would search out these facts and present them to you. You would then look over the lessons and correct them where there are errors; or the pupil may correct them himself. In that way there is information imparted in history, and also instruction in language. The pupils are learning in two directions. I cannot see why this objection to text-books is insisted upon. I have used text-books with a great deal of success.

In regard to the time children should begin the study of history, I think a great deal as Dr. Latham does, that it is better for children to be well grounded in geography before they take up the study of history proper. We generally take up history in the latter years of the course, say the fifth year. We teach them geography from almost the very beginning; and at about the fifth year our classes begin the study of history—generally the geography of home at the first. And, in that way, we think we give them very good information for the time they are in school upon the general subject of history.

MR. A. S. CLARK, of Connecticut: I do not know that I have anything to say of special interest, but I can give my own experience. And depending upon that, I must say that I differ entirely from Mr. Goodall in the method I think history should be taught. As to the importance of history, we sometimes see that disputed. I have seen within the past year, in some of our deaf-mute papers, the question asked, "Why should we teach history?" I am surprised that such a question should be asked. I think it one of the things we are called upon to do—to instruct our children in things that have been done.

As to when the study of history should be taken up, in our institution I think I may say we are about ready for it at the beginning of the fifth year. Of course that will vary. A certain class, especially bright, may be ready at the beginning of the fourth, and another class not until the beginning of the sixth year; but the fifth year is about when we place it.

It presupposes that during the preceding four years of the child's school life he has been over, substantially, all of the forms of language so that he has a great many ideas; and that he can express those ideas in good, fair language. Now, what shall we do with him? Shall we build a wall about him and place him in a well, as it were, by keeping him confined to the school limits of the institution; or shall we make all that he has done a ladder or stepping stone to a vantage point from which he can see and get his horizon enlarged. I think it is our duty to our pupils to do this. I think it is our duty to instruct our children in the idea that not I, or my teacher, or this institution is the center of everything; but that there are things outside of this teacher, or this institution; and that this is but a fraction of the great world. And how shall we do this? By confining him to the things about him? No. But by introducing him to the things that have transpired in the world. I say that the study of history is necessary, in order that the child's horizon may be enlarged; in order that he may be a good citizen.

The study of history is a help in the study of language, and in the enlargement of the child's vocabulary. The child must sometimes deal with books and with papers if he is to be a part of this living world. How shall we prepare him for this? Shall we give him the simple language which he understands and which the teacher knows he understands, until his course is done, and then send him adrift into the world? No. We must, under our profession, start him in that line of work which will fit him for taking hold of the books and papers from which all his life he shall get the information which he needs. The safest way is for the teacher to take the child under his care and lead him gently and carefully in this path. Difficulties rise of course. It is very easy for the teacher in the study of history, in taking a class as we do in our institution that perhaps has been taught three or four years by some other teacher, under careful training in language; it is easy for a careless teacher to spoil that child's language entirely. There is no need of it. If the child's language goes to pieces it is generally the teacher's fault.

How shall this be done? How shall we so introduce our children to the study of history that it shall be pleasant and profitable to them? The Principal brings into the school-room every year a set of new books. Every eye is delighted. A new book! It remains with the teacher to decide whether the first two or three mornings in that book shall utterly discourage the child; or whether it shall be succeeding steps, each one more delightful and pleasant than the one before it. The study of history is not dry, nor dull, nor uninteresting. It may be filled with life and pleasure. I say so because I know it. How? I will take the liberty of giving you, briefly, the way in which history has been taught in our institution. I lay no claim to originality in regard to it; because a large part of it is what I myself have learned from those who went before me. Some of it I have worked out for myself.

A new book is placed in the child's hands. The teacher, before giv-

ing the lesson, reads such parts of the book as he thinks will be a suitable lesson for one evening. Be careful that the lesson is short enough. Do not make it too long. Read it carefully. The teacher sees words, expressions, and phrases that he knows the children are not familiar with; what shall he do about those? Select such words and write them out on the board where the children can see them. Place by them the sign for the part of speech to which they belong, and place on the same line the synonym for that word. Having done that, for the sake of accuracy let the class copy these words on paper, or on a little book prepared beforehand, perhaps. Then assign to them, say half a page or less. Let the pupil know that that is to be mastered. What do I mean by mastered? I do not mean memorize the language, although it may be memorized; but by mastering it I mean obtaining possession of the ideas that are in there, so that the next morning when the class comes before me, and I choose to call up a single pupil, and he faces me, the class looking on, and I very carefully select a point and ask him in signs about that, he understands the signs and knows what I mean, and can respond by signs. I know whether he knows it or not. I must make allowance for the child's capacity, of course; we must work patiently and carefully; and by doing this day by day we find we are getting a grasp of the book. In a short time new words will recur and other words will come, and the child's vocabulary is being enlarged, and his knowledge of phrases is being enlarged; but most of all, he is getting a knowledge of how to get information for himself from books. I would not resort to a practice that I think is sometimes resorted to before the lesson is given—opening the book and calling the attention of the class to it, and giving the ideas that are there. "No, the ideas are in the book; take them out for yourselves." I demand that every child get for himself the ideas that are in the lesson; and if he does not, I want to know the reason. I find no difficulty in teaching the lessons in that way. The lessons are learned uniformly and perfectly according to the ability of each special child. There is no failure about it.

In connection with this the child recites by signs, and it is a very proper and profitable exercise for the teacher to write out himself a synopsis, in simple language, not book language, but in the simple language which the pupils would naturally use themselves were they familiar with those ideas. Write it out in that way and let them read your version of it, and perhaps some time during the day have them put it into a synopsis; all the ideas that they have had in the lesson. I do not see why this should be hard. I have not found it so. I find constant delight and success in my class.

I would say that since February I have varied this somewhat. I have found that it was not necessary to question the class by signs, to see whether they understood it or not. I found that they did, that they had so mastered the book that they could give the ideas that were in it. So I said now we will make this lesson a special language, instead of a sign lesson. So every morning I wrote out, not in their presence, but so that they could not see me, a set of questions, covering from one and a half to two pages of the lesson, which was United States history. There were about forty questions. They did not see the questions with their books open. When the time came the books were closed. The questions were presented to them and they were expected to answer those questions embodying the whole of the lesson; every thought and every idea expressed in the lesson that was

meant to be drawn out there. I found that a very successful exercise. We found that in the course of fifty or sixty pages we had some one thousand six hundred questions. The class became very familiar with the lesson, quite as familiar as with signs and enlarged their vocabulary.

A MEMBER: Do you have the class submit those replies to you?

MR. CLARK: It is very necessary that every child should have his paper carefully corrected. I have here a sample, but not the best sample of that sort of work, which you can examine. They cannot answer those questions by just taking out a part of the sentence, but they must form sentences for themselves in their answers. I ask a question and the answer must be given, not yes or no, but it must be given as it should be given.

The history that the child will naturally take up first will be a history of his own country. He wants to learn about the things that have transpired in his own land. He wants to learn what the different political parties mean, because he is going to be one of those citizens and a part of this great country. He wants to be an intelligent man. And our duty to the child rests just here. We are to prepare him, to arm him at all points. And I claim that we cannot better do this than by the study of history. The study of the American history that I use naturally covers about two years; that is the fifth and sixth years of the pupil's course in the institution. The seventh year we generally take up English history. Of course a child has not become accustomed to books by the fifth year. We need to test every word and every idea. The teacher must not be in a hurry—must be slow and thorough. If the class can go through American history thoroughly in one year, there is no objection, but I have never had a class who could. I am willing to spend two years in it. They have used Lossing's Primary History, which is the best that we have yet found. Then by the seventh year he is ready for English history; and the eighth year, which is frequently the last, he has the history of the world so called, and also in connection with that a physical geography, or something which is akin to it. And we think by that time he is pretty well equipped, and we find it to be so as a matter of fact, for life's work.

One thing I will mention, that we review very carefully by subjects, by topics, and by names. I, myself, in connection with all the history I have ever taught, have written an account, for the pupils, of every character mentioned, and of every event I have located the time. I insist upon their having some idea as to whether it occurred before the flood or yesterday, and I would not teach any fact without locating it somewhere at some time.

I find one profitable exercise to be this: I call upon the pupils to take their slates and stand up, and I give them some topic that we have had a few days before, assigning to each one a different subject, and request them to write what they have learned. It is a very efficient exercise. When they have finished I let each pupil examine what the one next to him has written, and to correct the mistakes, if any occur. This makes them very careful, and any pupil who has any pride will learn to do his very best to avoid such mistakes. It helps to guard against carelessness in language, for they feel that the time has come when they must stand before their peers, and show whether or not they know what they have been trying to learn.

A MEMBER: How many pupils are you required to teach?

MR. FAY: I have had fifteen in my class during the past year.

A MEMBER: Do you allow the children to criticise and make remarks about the lessons?

PROFESSOR FAY: I allow the pupils full opportunity to ask me any questions they choose, but they must ask them of me directly. I allow no criticism among themselves. When they have a recitation on hand that is the first business. I criticise the lessons myself rather than let the pupils do it, unless I have an exceptionally bright pupil that I may appeal to; once in awhile I let him or her correct them. I think that is a better practice.

DR. LATHAM: I have used practically the same system that Professor Fay has spoken of in the past year, and, I think, with great success. In the last examination the majority of my pupils received over ninety per cent out of the possible one hundred in the examination, and with about that same system.

MR. HOTCHKISS, of Washington: I have had no experience in teaching young children, but I have had experience in teaching history. I think the text-books ought not to be used with little children; that it requires considerable development in order to understand the history of the actions of grown men and women, and little children are not equal to it. I think that stories should be selected from history to give to little children, making them also the means of improvement in language. But I do not like to call that history. You might as well call the humorous stories found in the newspapers history.

With regard to teaching history to older pupils, I agree with Dr. Latham, that a knowledge of geography ought to precede the study of history. Referring to my own experience in teaching children history, I ask them about some city, and if they do not know about it, or where it is, I show them the location in the atlas and then ask them to find it on the wall map. Often they cannot do it. Trying to find Greece, and knowing it is a peninsula, they will pick out Spain, because they have not learned from geography where Greece is. They may be able to find Greece on a small map or atlas, but not on a large wall map. I have found out that in this way a great deal of time is wasted in the teaching of history, in correcting mistaken ideas in geography. Miss Thallheimer has written an excellent history, in which she urges that a knowledge of geography should precede that of history.

In our department, in the institution at Washington, we have constant recourse to maps to find places mentioned in history. Much of that would be unnecessary if geography was better taught to the pupils before they came to the college, and we should have more time for the proper work of teaching history.

Connected with that I have sometimes required the drawing of maps connected with the lesson in history. Sometimes in examination I require the drawing of maps, but it takes a great deal of time. If there is not time to draw the whole map I have a skeleton or outline map; for instance, historical Asia, Africa, and Europe. I have that prepared beforehand, simply giving the coast lines of the country, with a few of the rivers, as the Danube and the Rhine, to serve as landmarks, so that the pupils will understand thoroughly what it is a map of, and I give them to the students in their examination, with a list of the places referred to in their history lesson, and I require the students to place each of those cities on this outline map, and, in connection with that, to write what events they know of in connection

with those places. I find that a very successful plan of testing their knowledge of geography. In that way I also show how places are related to mountains and rivers.

I admit it is very difficult to teach dates so that they will be remembered. My endeavor is to require the memorizing of leading dates; the dates of the leading facts of history which are often referred to and are necessary to know; the date of the fall of the Roman Empire, for instance; the relation of dates to one another. One event occurs ten or twenty years before another event, and it is necessary for them to know the one date, and then they associate the others with that. Referring to the revolt of Asiatic Greece against Persia. Who was the ruler of Persia at that time? Darius. It is necessary to know the connection of those events with one another, and you cannot do that except by knowing the dates. And so in modern history, I select some prominent man, and make him the central point upon which to hang other events. For instance, I take the date when Andrew Jackson died. It is very easy to connect other events occurring about that time, with that. But whatever method is employed it is necessary that the pupils should have some knowledge of dates. They must know whether Lincoln lived before or after John Adams.

MR. SPRUIT, of Iowa: I have not had much experience in teaching history, but in what experience I have had the main difficulty has been to get the child to understand the idea contained in the language—the idea of the picture behind the language; to get the child to understand the fact as the language attempted to portray it. And I have not found it advisable to confine the pupil to the language of the text-book. I have had recourse to illustrations of all kinds. Sometimes I have illustrated what I desired on the sand table. For instance, taking the settlement of Jamestown, to make on the sand table a picture of Jamestown, and the river, I would cut sprigs of evergreen to represent the forest, the Indian huts, and so forth, to give an idea of the country when our forefathers first came there. To teach them the meaning of the word "settle" I would show them, as I have said, on the sand table, a country covered with forests, and show them that the settlers came there to go to work; that in the first place they must have a place to sleep, and they cut down the trees to make log houses. Then what is necessary next? They must have something to eat, and they begin to till the soil, and they must have room for their food to grow, and they cut down the trees and clear it off. Then the population increases, and others come, and they keep on clearing, and after awhile we say the country is being settled. I represent the first on the sand table so that they know what the idea is contained in that word. And a pupil who has in mind an idea of what "settle" means, by that picture, will have a better idea than if he is simply given that word. So with each topic, for instance, before the year 1800 in our history we have to do with colonization, with war, then with peace, prosperity, commerce, etc. I attempt to give each subject clearly, either by action, or by picture, or by having it upon the sand table, and, if necessary, we have it acted out. In our school we have had illustrations of war, giving an idea of the opposing armies so that they clearly understood it. Then we would show the meaning of victory and defeat.

MR. WILLIAMS: In the study of history I think the teachers should keep in mind, all of the time, that there are two distinct things: first,

the ability of the child to take ideas out of book language, and when the child undertakes to reproduce these ideas, that he should not be allowed to use the book language, but that he should be obliged to put those ideas into the same style of language that he would use to express his ideas in regard to anything that is taking place. He should be compelled to express it in his own language.

MR. GOODALL: That is exactly what I do by my process.

Here the normal session adjourned until seven o'clock this evening.

AFTERNOON SESSION.

Professor Gillett in the chair called the convention to order. Rev. Dr. McClure, of Nebraska, offered the opening prayer. The Secretary read the minutes of the last meeting, which were approved.

THE CHAIRMAN: I have just received a letter which came in the mail to-day from the oldest living teacher of deaf-mutes, and the oldest Superintendent in America, Mr. W. D. Kerr, of Missouri. He is now approaching eighty years of age, and is still in active service. The letter is as follows:

MISSOURI INSTITUTION FOR THE EDUCATION OF THE DEAF AND DUMB, }
FULTON, Mo., July 13, 1886. }

To the President of the Convention of the Teachers of the Deaf and Dumb, Berkeley, California:

DEAR SIR: Permit one of the oldest teachers of the deaf and dumb to send through you his greeting to the fraternity in convention assembled at Berkeley, and to express his unfeigned regret that circumstances beyond his control have prevented his attendance. For about fifty-five years I have been an instructor of the deaf and dumb. During more than half a century of experience and observation I have witnessed many changes, and watched closely the varying fortunes of our institutions; and now, in the evening of life, I feel grateful that so much has been accomplished for the unfortunate class among whom much of my life has been spent and with whom are my warmest sympathies. Much remains to be done. The world moves, and I rejoice that our profession has not fallen into the rut of anti-progress, and am willing with patient effort to try all and hold fast that which is good. On one of the questions that will come before the convention permit me to express my opinion. While quite a number of semi-mutes may make practical use of articulation, the beautiful and expressive sign language will continue to be the medium of instruction and communication for the great mass of the deaf and dumb. And yet, with all my half century of experience, I am not too old to learn nor too prejudiced to admit that there may be found methods far superior to any I have known and used, and none would rejoice more than I to see it demonstrated that my opinion is too hasty to be correct.

If what my friends tell me is true, my enforced absence confers upon my excellent friend, Dr. Gillett, the rank of veteran Superintendent of the convention. I abdicate cheerfully in his favor.

Trusting that the interchange of views at this convention may result in great good to the unfortunates among whom we labor,

I remain, respectfully,

W. D. KERR.

THE CHAIRMAN: The first paper to be read this evening is, "How to Conduct a Scientific Examination," by Theodore Grady, of California.

HOW TO CONDUCT A SCIENTIFIC EXAMINATION.

We assume that a fair mode of ascertaining the results of academic work at stated times is indispensable to the well-being and progress of any school, and that nothing exerts so powerful an influence, by way of stimulation to active and faithful application, upon the teacher and the pupil alike, as a fair and intelligent examination. We assume that the more critical and discriminating the investigation

grows, and the more strictly we hold the pedagogue and the student to account, the greater efficiency of the work becomes apparent. Experience justifies the conclusion that our assumptions are not unfounded. Grant all this, and it follows that it is a question not only of utility, but of moral obligation. No one denies the fact that an officer in charge of any educational undertaking is morally bound to render a satisfactory and authentic report of *faithful work* in every department. That accounting must be honest and accurate. He must conscientiously avow that his charge is in no way suffering from incompetency and negligence of duty, and that his wards are enjoying their just share of official attention. Where incompetency and waste rule, means must be devised to get rid of them; it must ever be regarded in *practice* a crime to acquiesce in them, or to sanction them.

The term "scientific," used here to qualify the meaning of our subject, presupposes a certain attitude of mind in the examiner. We cannot lay too much emphasis upon the manner in which an investigator mentally approaches the object of his search. We have no reason to expect delicacy and dexterity of manipulation from an awkward and negligent experimentalist. All that has been said about the necessity of the "scientific spirit" as a prerequisite to a successful career in scientific discovery applies with equal force to a true and impartial survey of the results in the class-room. It will do us no harm if we wander from our point and hunt the full meaning of the expression "scientific spirit." It may be defined to be a characteristic consisting of an intense love of truth for its own intrinsic worth in preference to all things, accompanied by a desire to arrive at certainty and accuracy, and by an abhorrence of everything that tends to interfere with the judicial nature of the mind—self-interest, and bias in every form. Therefore an examination, in order to be scientific, must be conducted in a scientific spirit, and must be certain and accurate in every part. It must be critical and thorough. It must be discriminating, even to a nicety, in its nature. In other words, it must be able to determine the rank of each pupil even to a decimal. Of course due allowance must be made for every disturbing element, but only a valid excuse is accepted. It must be adapted to every stage of mental growth, and its motto will certainly be, *fair, but thorough*.

Let us proceed to the discussion of an ordinary examination in detail. The first question that confronts us is: Who should conduct it? Everything depends upon the examiner. He must be competent and upright, and free from all pettiness of mind. He must emphatically be liberally imbued with the scientific spirit. He may be the Principal, or one of the teachers, or an outsider. If he were the Principal, he should endeavor to make it a regular institution of the school, and to allow nothing to interfere with the work at any price. Were he a teacher, common decency would require that he have nothing to do with his class in the preparation of the questions and appraising the credits. Should he be an outsider, he ought to prepare himself for the work beforehand, especially as the nature of our education requires special study. Many of our institutions are situated in the neighborhood of an excellent college or university. It would be a good idea to get one of the professors or instructors interested in the cause, and to engage him as our censor. Let us anticipate your objection upon the score of finance. Why, every busi-

ness house of any importance annually sets aside a certain fund for the purpose of employing an expert to verify the books. The money is never regarded as wasted. Why should we not do likewise? We spend thousands a year in the routine part of the work, but we object to employing a pedagoging expert. We flatter ourselves that we discharge our duty in running our machinery in a perfunctory manner, but we seldom, if ever, insist on a scientific summing of the results to see whether the concern has been a losing affair. We never run any business by sufferance or by special leave and favor; why should we do it in our educational work? Why do we invite an outsider or outsiders to investigate the condition of our schools, and ask them to tender a complete and scientific accounting of our educational fruits by special leave and favor? Do you suppose that their report can be otherwise than cursory? How ridiculous we seem in our request, when we consider that it requires from six to ten days to examine a school of one hundred and fifty to two hundred children, and a month to prepare the questions, to inspect the classes, to examine them, and to find the percentage of each child, and to make a final report.

When the number of children to be examined is very great, say three hundred to six hundred, it requires more than one man to do the thing. A committee or board of three examiners, each one of them bearing a high reputation for integrity, is suggested. They may divide the work among themselves, or may work jointly. Were they teachers engaged in the place, they should neither hold dealings with their own classes, nor with those of their fellow examiners. Let the three classes be examined by the Principal in the same manner, and with the same scrupulous care.

Now we beg leave to notice the nature of the questions and the marking system. The questions should be fair and thorough, and discriminating enough to discover the real merits of each pupil, and to place the children in their true ranks. The number of questions to be propounded must be regulated by the grade of each class. It may be generally stated that where the faculty of judgment is least developed, the number should be large, and where the power is most completely developed, comparatively speaking, the number should be very much limited. For, it is unfair to expect kindergarten folks to judge for themselves what is important to commit to memory and what is not. Therefore we ought to see that they lose fewer credits when they fail to answer a question than the children of advanced classes do.

The marking system should be certain and accurate. There must be no guesswork even in appraising the credits; but, on the contrary, everything must be calculated in a purely mathematical manner. It would be a much wiser act if we should adopt a severe test like that in use at West Point, and require a low passing mark (as in vogue at Harvard University, where the passing mark is 40 per cent), than if we should maintain a higher standard, and a loose marking system. The questions should be uniform in their nature through all classes, and the marking system should be made to work no injustice to anybody. We should never endeavor to entertain anything like a sham, for our little ones will surely mock us to scorn.

On the whole, the examination should be managed on pure business principles, and nothing should be taken for granted. Like Cæsar's wife, the teachers should be above suspicion; and for their

own protection should avoid suspicious appearances, especially as they are surrounded by a class of keen observers, whose powers of drawing personal inferences seem to be abnormally developed. The unfortunate teachers would be the only ones to suffer. Heaven help the man whose reputation is forever under a cloud, and who can never have an opportunity of proving his absolute innocence! Therefore no maudlin sentiments ought to stand in the way of a business-like examination. We never feel slighted when a receipt is demanded of us.

We have expounded the nature of an examination as is in common use in the public schools, with the exceptions suggested as specially suited to our peculiar work. But we shall now proceed to discuss the merits or demerits of that system. However, we may repeat that in order to conduct an examination fairly and justly, we must have an idea of what the object of education is. What is it? Is it the development of any single faculty or an aggregate of faculties. Bear in mind that we have only to deal with education as far as it concerns the intellect. If it aims at the cultivation of any *one force* of mind, what is it? Is it the power to judge and comprehend—the intelligence as in contradistinction with any other single faculty, as for instance, memory? Now let us look at the public school system and account, if we can, for the general tendency toward superficiality. Do not we find the burden of proof lie in the mode of conducting the examinations? What do we see? A vast process of memorization. We engage to find how much our children *remember*, and congratulate ourselves upon the result. But we hold no official recognition of that important factor of mind, which we call *intelligence*. Our children enjoy a smattering of the languages (including their own English), and the sciences; but they lack the scientific spirit—they don't observe, they don't think, they don't reason, in the proper sense of each word. Were they so situated as to possess a vernacular different from the one in vogue at school, and as crude as our sign language, the evil effects would be much more palpable. If that is the condition of our public schools in general, with their elaborate system of balances and checks, what must be said of an ordinary institution with its extremely elastic condition, where everything seems to be run in a *dilettante* sort of way? Is not memory practically regarded as the end of education? Do we not sometimes go a little too far and treat education and memory as synonyms? Do we not sometimes believe our duty discharged when we preside at the mechanical reproduction of a lesson? Do we not long fondly for the day when we should crown our work by making our pupil a living phonograph of our words?

How are we to discourage or to avert those tendencies, while not underestimating memory as a disciplinary power? Let us recognize the much abused faculty, intelligence, when we ascertain the results of class work. How to do it? Here is a suggestion. Suppose we hold an oral examination, as it were, immediately after the written one, in order to see that the pupil understands each question and its corresponding answer. Further, let us prepare a list of test questions from the text-book, or from the teacher's memorandum, in order to determine his intelligence. In this respect, since it concerns the intelligence solely, the queries should be somewhat more difficult than those used in the written exercise, especially as it consists of reading at sight. Each answer is to be graded according as it gives a clear, vague, or obscure conception of the meaning of each passage, as the

case may be. The credits acquired at the two examinations should be kept and entered separately. An average of the two would give a fair estimate of educational progress made by the scholar. We may go a step further and allow him credit for the faculty of expression according as the answers are couched in good, indifferent, or bad English, as the case may be. The class average in each of the three instances will betray each teacher's standing for the past term, and the Trustee of our educational estate will possess an authoritative record of the condition of the estate.

However, in order to do full justice to the work on hand, one should make a personal inspection of the classes previous to the examination. The object of this inspection is to acquire an insight into the method and plan of instruction as pursued by each teacher; and this thing should not be accomplished in one day. The purpose of a perfect and complete examination would be defeated if we had neglected to take into account the aim, theory, and the practical work of the past term. So let us supplement the examination of the children by that of the teachers. However, this supplementary inquiry does not partake of the nature of a competitive examination, but is simply an inquiry into the character of the work done in the past, and necessarily the aims and theories which governed that task. This object may be attained by issuing a circular to each teacher some time in advance of the school examinations, in which paper as many questions may be propounded pertaining to the nature of the professional labor as may be proper in the opinion of the conductor. The pedagogue is supposed to answer them in a proper spirit. The questions and answers need only be very brief.

To illustrate: We may ask, among many other things, what amount of time is spent on each subject of study—time to be calculated by hour per week; what study is regarded as the most important; what end or object he has in view, and so on. Each question is intended to serve a purpose. Thus, in our inquiry concerning time, we would know whether each subject required so much. To be more practical, we propose to judge a teacher's success, not by the general average of the class in all studies, but chiefly by the average of the section in the most important study—important according to the teacher's opinion and the amount of time given it. Therefore, if he make a failure of the class in the central work, his labor is supposed to be lost, even if his pupils as a body gain a high percentage in the rest of the studies, especially when that subject commands an unusual amount of attention and time. This is based upon the principle of cause and effect.

Further, if the class attain a high standing in the least important study—in the sense of the least amount of pedagogical attention—the head of the section is not to be credited with it, as it may not be an effect of his work, unless he is successful in the most important phase of the task. In other words, the grand total average of the class may reflect upon the teacher where there is no failure, in the collective sense, in the most important study; but not when there *is*. A failure in this single instance is a total failure on the whole. The number of important studies is not restricted; it may be one or more, according to the nature of work required of each class. There should be no such a thing as guesswork or luck with the teachers.

It may be disputed that we apparently allow the teacher very little freedom. No; it is a mistake. They are as free as ever—just as much

as we are free moral agents—but we endeavor to hold them strictly responsible for their acts, just as we are morally for ours.

The best advantage of such an inquiry lies in this: It gives a man of tact the most agreeable and the most efficacious means of introducing reform into a class-room, and of remedying abuses, in a quiet and unassuming tone. For example, if we prize highly the science of teaching mutes how to read, we need not invade the pedagogical "sanctum sanctorum" and order the introduction in a dictatorial manner, but write down these questions on your circular and ask: What is being done to encourage outside reading? What is being done to teach our pupils *how* to read, and *what* to read? What is being done to enable them to obtain a wish to read, or, finally, to acquire, through reading, the art of thinking? So we may introduce any other questions to illustrate the progressive ideas of the day.

Another benefit may come from this plan. The Principal would command a clear knowledge of the workings of each class-room individually, and of the school collectively, and he would render himself useful in the highest degree. The effectiveness of the school system would reach its greatest density.

Let us anticipate a few objections: Time should be no objection; we ought to make time for the purpose, and we can always. An examination is always as indispensable to our cause as the routine part of the work. Much has been said about the "diabolic horrors of cramming," but, in general, they arise from a false conception of the mission of an examination on the part of the scholars, and frequently on that of the teachers. If the examiner should only show a clement and liberal spirit in his demeanor and mind, and if the teachers should discourage all excitement, the examinations would never be regarded in such a light.

Finally, let us suggest that the results of the examination be recognized as a part of the official records of each school by the Board of Directors, and no pains should be spared to render the examination thoroughly scientific. A separate fund, if necessary, should be created for that purpose.

Miss Annie M. Black here took the chair.

MISS BLACK: The next paper is, "Thoughts from my School-room," by Laura C. Sheridan, of the Illinois institute.

THOUGHTS FROM MY SCHOOL-ROOM.

If the title of this paper seems lacking in dignity, considering the character of this assembly, it may be pardoned by recalling the criticisms sometimes advanced in regard to our conventions, that the real difficulties of the school-room have not been presented so fully as questions having a general bearing upon the profession. Indeed, is it saying too much to say that aspiring teachers have felt a disappointment after attending a convention at hearing so little plain talk upon the practical questions that have knotted and snarled their school-room work? Our institutions are so widely separated, each one is so altogether a world in itself, the opportunities to meet and compare notes are so very rare and brief, that a writer feels diffidence in presenting difficulties, lest overmuch ignorance be displayed before those who have long since solved the questions that puzzle. But this fear should not deter candid expression, as only open, free,

frank, kind discussion can reveal the light that has come to some, to the good of all.

So we come before this convention seeking, questioning. We know not the experience of others, but for years we have had a growing feeling of dissatisfaction with the results obtained in teaching language. The sarcastic mood of the "Disgusted Pedagogue," as displayed in the "Annals" some years ago, struck a deeply sympathetic chord in our breast, but we are not so ready now to accept as inevitable that which discourages or disgusts. Indeed, we are full of hope that a radical change in our method of teaching in the intermediate and advanced grades will finally bring us to our goal—a class of graduates in possession of correct English.

When we view the style of composition prevailing in the deaf-mute world to-day, we cannot believe, notwithstanding all the discussion and experimenting of half a century, that the "natural method" of teaching language has been so discovered as to be applied continuously throughout the course, and this conviction is strengthened by the fact that the pupils make so much greater progress in language the first half of their course than the latter half, when the reverse should be true. We think the cause of this may have been failure to apprehend clearly in just what way the deaf child *must* learn language as a hearing child does, and in just what way he *cannot possibly do so*. He has been given practice when he should have had principles, and principles when he should have had practice. The hearing child learns language without knowing how he learns it; he picks it up, here a little and there a little, each occasion for its use adding a mite to his store. The deaf child must learn language as the hearing child, as to direct association with the ideas or circumstances that require the expressions used; but, instead of learning it unconsciously, he must give attention, effort, application, and besides, must suffer from every mistake of the teacher, which two facts sharply rupture the correspondence between the way hearing and deaf children learn language.

God runs this universe so methodically, so noiselessly, so unvaryingly the same, that the laws do not appear upon the surface, are never matters of thought except to the student, yet the slightest variation from its beaten track of a single law would plunge everything into ruin. Although the hearing child learns language so easily, so unconsciously, it comes to him under as rigid a reign of law as come the comets of our starry heavens in their periodical visits: so must the deaf child learn language under law. The teacher stands behind him as the creator. She must fathom all the laws and mysteries of construction, that she may know how to teach language aright, may know how to lead the pupil in a *right way* of doing without confusing him with a consideration of the law of his doing. That we have failed in so large a degree is no wonder, since the book of nature is the book of God, and not easily read. The time has not been lost if we are thoroughly impressed with the fact that what God has easily imparted to the hearing we can never hope to easily impart to the deaf, and of the fact that we will never learn to teach language properly until the why and the wherefore of every exercise has been mapped out carefully in our minds as a simple step following closely upon what has preceded it, and linked just as closely with a step beyond. The bane of our profession has been hap-hazard medley teaching. We all have used simplicity, method, and more or less of

common sense in starting our pupils, simply because we would never get them started if we did not; but the practice too common after that has been tersely expressed by another in these words: "We first bang away awhile at a single form of expression exclusively; then bang away at a medley of forms—present, past, future, perfect, active, passive—all being jumbled together and piled on top of the previous drill. We dump first one form and then another upon the pupil, in a promiscuous heap, instead of taking the greatest pains from the very start to keep them separate, and carefully placed, each upon its own special shelf, in the pupil's mind."

We propose to treat in this paper of four common errors in the practice of teacher and pupil which greatly hinder the latter's progress in language:

1. The use of words by the pupil that have no meaning to him.
2. Drill on words, tenses, or forms of expression apart from direct association with such facts and ideas as lead hearing people to use them.
3. The use and misuse of the text-book.
4. Our practice of assisting pupils in composition, and using phrases and terms of expression in correcting his exercises which he cannot comprehend.

To illustrate the first point take the articles "a" and "the." "Our pupils use them a long time without a glimmer of sense attached to them. After awhile we find that it is almost impossible to make them bear in mind that they have any signification whatever." The writer has never met a deaf-mute who will not make mistakes in using the innocent looking but terribly complex little article. One who can with care write English that would be creditable to many well educated hearing persons, and who can converse readily and intelligently upon topics of a profound nature, will in the careless freedom of letter writing make astonishing mistakes with the article. Show us the teacher whose pupils never make mistakes in the use of the article and we see the perfect teacher of deaf-mutes, because the close thinking, the ready perception of cause and effect in construction necessary to perceive and make plain the many distinctions between the proper and improper use of "a" and "the," will lead the teacher to go to the bottom of the difficulties of construction and attempt to teach no word without doing it in such a manner as to reveal to the pupil its relation to other words in the sentence. Inexperienced teachers have no idea how difficult it is to teach the article correctly. The writer once stepped into the school-room of a cultured lady, one who had had wide experience in responsible positions in hearing schools, but very little experience with deaf-mutes. When asked why she was permitting her pupils to write "*the wagon*" where the connection required "*a wagon*," she looked surprised and said she had supposed the former way proper enough, since it was grammatically correct. "A" means one, but not any particular one, *in distinction* from "the," which always means some particular one; but the average deaf-mute supposes "a" to mean one in distinction from two, or some other numeral, which meaning it never has.

After the first few months of school life, the teacher should never correct a sentence containing the article without asking why one is used instead of the other, and clearly explaining why when the pupil cannot do so. The pupils will take it up, and soon ask why themselves when they do not understand the why in sentences that they

see. So the pupil learns that we say, "I saw *a* train go by," because we may mean any one of the trains that go by every day, but that we say, "I started for *the* train," because we had made previous arrangements to take that particular train; also, that we say, "I bought *a* dollar's worth of sugar, and handed a two-dollar bill to *the* grocer," because we necessarily hand the money to the person from whom we obtain the sugar, but "*A* grocer sold a dollar's worth of sugar," because no particular grocer is designated; also that "*a*" may be used throughout in an example to speak of the worth of a pound of raisins because no particular pound in the entire stock in the grocery is designated, but that a boy buys *a* pound of raisins, and his mother weighs the pound, because she weighs the particular pound he brought home; also, that we say, "*The* key to *the* front door is lost," because that particular door has its own particular key, while we say, "You use *a* key to lock *the* door," because, while reference is made to the particular door of the room in which the remark is made, and which may have its own particular key, reference is not now made to the key, but to the kind of article among many articles that is needed to lock the door.

"A man had *a* new floor make to his barn," but "Mary spilled ink on *the* floor;" "A man bought *a* clock," but "I looked at *the* clock;" "A boy was carrying *a* pitcher but broke *the* handle," and many other examples might be given, but these will suffice to illustrate the great care that must be taken in teaching the article, lest we allow our pupils to write what sounds correct to the ear in simple composition while seriously wrong in principle.

To avoid the second error alluded to, we should always ask ourselves the question, "What are the circumstances under which a hearing child would express himself so?" and then teach the new tense or expression *only* in connection with real or imaginary facts. Why is it that bright pupils of six years' standing will be guilty of such a deaf-muteism as this, "One night Mrs. H. walked around the room and her husband heard her and thought she was a burglar," when they understand perfectly the meaning of the progressive form of the past tense, and supply it immediately at the suggestion of the teacher? It is because when the form was first taught them they were allowed to write it in meaningless, detached sentences, such as, "A man was plowing in a field," "A girl was walking in the garden," or else having been taught it correctly, as always closely connected with something that immediately preceded it or followed it, they have not been habituated to its use by being required to *always* use it where its use was possible. It is not enough that a sentence is grammatically correct. We must go beyond correct sentence writing in our ambition for our pupils or they will ever remain bound in deaf-muteism. "Can I possibly lead the pupil to express this idea as a hearing child would?" should ever be the earnest question, and a question asked again and again, and brought under the focus of the powers of the mind in stern and rigid search, until the secrets of the laws of construction reveal themselves and we see plainly and make plain to our pupils those laws. We fail largely in teaching language because we do not think enough about *the how to do it*. For every form of expression we use there was a way, a road by which it reached us and became our own, and it is our business to search out that way, that law, and teach the expression to our pupil in the same groove, for only so can he learn it, since law is eternal.

If we cannot think of any reason to give a pupil why an expression is written so, nevertheless there remains a reason, and in searching it out we may discover a principle under which a large number of similar expressions may be classified and made plain to him. Of course no one will suppose us to be speaking of the study of grammar. The illiterate person can do little to correct confirmed habits of speech by the study of grammar; neither can the deaf-mute learn language by studying the rules of grammar. He must learn language by using it, and by using it in direct association with what requires it, as we did. "Ah!" says the advocate of the so called natural method, "that is just what we claim. These friends who are all the time talking about method and philosophy would load the pupil down with rules and put him in such a straight-jacket as is nowhere else witnessed in nature in acquiring language." So in our practical every day work the natural method man whispers in our ear, "Learning language is mostly a 'pick up' process. If a pupil is anxious to express an idea, but does not know how, put it in language for him; for his mind is in that receptive condition to make him seize upon it and remember it." The philosophical method man whispers, "Be careful! By all means give him a new word or two if you can fit them into constructions with which he is already familiar; but as sure as you write out a form or idiom that is new to him, you lead the way to greater confusion in his use of language in the future. Drop everything and teach the new construction thoroughly, or withhold it until you can do so." There is no quarrel here, but there is such a thing as the natural method running mad, and so crowding the pupil's memory with a mass of forms that half the time he does not know which one he needs to use of the medley in his mind.

To teach a new form of expression, the teacher needs to have thought out his subject thoroughly, so as to be able to give reasons and explanations for difficulties that may arise. Then it should be taught in sharp contrast with those already familiar, ringing changes being made upon it in composition to see if the pupil understands the teacher's explanations and the manner in which this new expression differs from others. Step by step; practice, practice, practice; is not this the way to learn language? Encourage the pupil to "pick up" all he can by reading and conversation; but he has a whole lifetime for that, and only a few years of precious school life for drill in principles. When he "picks up" in the school-room by wrong practice, he falls a victim to the principle embodied in the old adage, "Teach a horse to trot, and he will never learn to pace."

But, says one, to take time to so teach all new forms of construction arising in lessons would leave no time for anything else. That is so; which is why we think a radical change is called for as to the character of the lessons we assign our pupils; such a change as will dispense with the text-book, and make the language of lessons so simple that everything new can be brought out and developed in the recitation, as is the case with hearing children. Having had opportunity to observe the vastly superior results obtained in starting pupils with the past tense in connection with action writing, journals, story writing, descriptions of pictures, etc., without the use of a text-book for three or four years, over the results obtained in starting them with the present tense and constant use of the text-book, we cannot but conclude that the same principle, carried out in the entire course,

is the only way to attain unto our goal—a correct use of English on the part of our pupils.

If there is a constant outcry against the text-book for the hearing child because he stumbles over the hard words, what shall we say about the text-book for the deaf child, when the construction, in addition to words, has to be laboriously explained by the teacher, only to run out of his mind like water from a sieve, so far as practical benefit in language is concerned. What folly to suppose that there can be benefit in memorizing lessons that cannot be comprehended by the unaided effort of the pupil *as to the construction*; and until our pupils can write correct English in simple style where is the text-book that can be so comprehended, unless prepared especially for them. If our condemnation of the text-book seems immoderate, let a burning sense of the wrong it does our pupils, in consuming so much of their precious time and making so little return for it, atone somewhat for what may seem ultraism. Again and again graduates of a few years' standing have assured us that they would have preferred omitting several branches that they had studied if the time spent on them could have been spent in practical composition. Is the lack in language the crying need of the deaf-mute world to-day, or is it not? We put our ear down where we can hear the fever-heat pulse of desire and the burning heart-throbs of sorrow over business failures and social mortifications, and we hear nothing but "Yes, yes, yes." We think our old pupils, who have gone out into the world, would really hate us if they thought we had not done all we could to give them a command of language.

Our plan is, now, some language first, then devotion to certain branches of study considered indispensable to the dignity of any school. Should it not rather be, to give our pupils a knowledge of English that will lead to its correct use and such knowledge of other important branches as can be conferred in the process of teaching English. If we could so reverse matters at least deaf-mutes and their friends would invoke blessings upon our heads.

When the pupil is pinned down to hard facts in practical life what compensation is a smattering of a few scientific studies instead of power to use that language which is indispensable to his best success and to his happiness in social life, not to speak of the unlimited source of enjoyment he would have within himself could he read books and papers with ease.

Our faith is that the intellectual life of our pupils need not be in the least cramped by such devotion to English. Is it not the language into which all intellects have poured their wealth, and can it be acquired by the deaf-mute without as actively engaging his intellectual powers as any study could? We think not. We rather think that it can be so taught as to bring into vigorous and harmonious exercise all the faculties as present methods cannot.

There is a great field of endeavor, perhaps as yet almost untried, in connection with the lecture and dictation methods. We learn that in a certain institution philosophy and chemistry are studied without a text-book, recitation and examination consisting of the performance of experiments in the laboratory and the putting in writing, on the part of the pupil, of information which had been imparted by the teacher in lectures. If any object that such a method places the pupil in contact with no language superior to his own we are met with the fact that in that institution the advanced pupils have such

command of language that they can do what we never heard of them doing in any other institution—write respectable compositions on current topics of the day before visitors, on topics assigned by the visitors, without five minutes warning as to what they would be required to write about. The only failure witnessed by our informant during a period of two years was when a pupil was given a topic on the money question.

Do not medical students study mostly by reading, attending lectures, and making copious notes of the information imparted, and is not this becoming a favorite method with the best educators.

Superintendent Jenkins, of the New Jersey school, has an admirable paper in the April "Annals" "About Teaching Geography," which illustrates how the kernel may be extracted from the text-book by the teacher, and the knowledge which is of most importance to the pupil grasped by him as it could not be when buried in the, to him, conglomerate mass of the text-book. The writer has tried the description of imaginary trips to countries, the pupils getting their information from the book and from the teacher, and although taking a prodigious amount of time in the correction, the pupils were eager for them. They pronounced them much harder than the memory lesson, proving to be without foundation the objection advanced, that to dispense with the text-book makes it too easy for the pupil. There is no doubt that it makes it much harder for the teacher.

Again, a memory lesson, the language of which requires half an hour's explanation in signs, could not fail to be much more profitable as the foundation for a dictation exercise in natural signs. No other exercise exacts from the pupil such alert and intense mental activity, while it reveals to the teacher his own shortcomings in failing to make signs clearly, and, as nothing else could, that some of the language of the lesson is away beyond the pupil, since he fails utterly in his effort to translate it from signs into English. After such an exercise has been corrected, the pupil will inspect the teacher's lesson with the greatest eagerness to compare its language with his own. Of course such methods as these are so tedious and slow as to the ground they cover, that none will have the courage to use them of whom anything is expected of the text-book at examination time, but the tortoise pace is the pace at which all must learn language.

Last but not least is the evil arising from assisting pupils with their exercises. In correcting them we are constantly using forms of expressions that are uncomprehended by the pupil, and how often is an entire sentence written out simply because he has not the least idea how to do it. This common practice, however necessary apparently, can be vicious and vicious only. As soon as it begins, confusion enters the pupil's mind; this imperfect instruction becomes mixed with that which was perfectly imparted, and soon he knows nothing thoroughly. In addition, finding that he is not expected to write correctly, he makes no great effort to do so, and fails to be duly impressed with the extent of his own ignorance and of the mortification and inconvenience it will cause him when his school days are over and he has no teacher at his elbow to help him out. Although it may detract somewhat of interest and enthusiasm from language exercises, it seems to us that no assistance should be given the pupil which involves anything new in construction. Any number of new words may be given if certain that they are the right ones for the right place, but any assistance beyond this usually sends the pupil to

his seat with but a faint glimmer of what our hasty explanation meant. When the pupil learns that he must, unaided, put into some kind of shape every idea he wishes to express, the very inconvenience he suffers in being refused aid will be a spur to greater effort to improve opportunities for instruction, while the teacher will have a constant and eminently practical source from which to draw topics for language exercises that take the form of drill in principles; also, the pupil will develop a versatility of expression with the language already at his command that will be of untold value to him in after life. Letter-writing day will be a trying day, but the day of all others when every pupil will realize where he stands, and if we have to spend time writing a part of our pupils' letters why not do it under our own name? We would not be surprised if such a rigid rule, faithfully carried out, would, in a few years, raise the standard of our pupils' composition beyond all expectation, because the criterion of the ambitious pupil would soon become to write so that nothing would be scratched out by the teacher as impossible of correction, without breaking the rule.

But perhaps the best result of all would be that such a rule would compel the teacher to teach step by step, to teach carefully, methodically, thoroughly. Such a rule would concentrate the attention of both teacher and pupil upon construction rather than upon words, and lead to more rapid discovery of construction's laws. Is not the conviction arising that in the past we have been whacking around among the branches of difficulty instead of striking at the roots, have been teaching a hundred words where we have taught one law, although the thorough teaching of one law would cause a thousand words to fall into line and do their duty; and have not words been taught very superficially by failing to see that a verb could not be thoroughly taught, thoroughly at a pupil's disposal, until all its derivatives had been taught also, and taught in contrast as to their various meanings, because in signs there is no way of bringing out the difference of meaning clearly? We refer to such classes of words as "obey," "obedient," "obedience," "obediently," which are signed practically alike in conversation, but how diverse their written use!

As to this important matter of teaching construction and the derivatives of words, we seem to see a morning star arising out of the gloom since we have examined and put to some little school-room test Mr. George Wing's simple but comprehensive system of symbols, treated of in the "Annals" for July, 1885. We enthusiastically believe that they embody a principle which, if they are rightly taught, could in a few months be made to convey to our language-bewildered pupils clearer ideas of the relation of different parts of a sentence to each other as many years of the study of grammar.

Some may think we have exaggerated the importance of giving our pupils a good command of language, but we feel confident that when we touch this subject we touch the great hidden sore of the deaf-mute world. Instructors in general have no idea of the feeling that exists on this subject. They think that when pupils are negligent they do not care, but our experience is that the older pupils grow the more intense becomes their interest in those exercises, so conducted that the pupils cannot fail to see that they explain away difficulties in language. And we have seen tears well up in beautiful eyes as the inability to use proper language has been spoken of as the greatest cross of life, while we have heard the assertion, "I envy you your

command of language," nineteen times where we have heard once, "I envy you your power of hearing." People pity the deaf because they cannot hear, but they bemoan themselves because they cannot use correct language; cannot read with ease and pleasure. Nothing is really known except what has been experienced, and those who have been face to face with the heart burnings of the average deaf-mute graduate know that there is hidden pain here that has not been dreamed of.

MISS BLACK: The next paper to be read is upon "The Duties of Supervisors," by R. M. ZIEGLER, of Philadelphia.

THE SUPERVISOR OF DEAF BOYS.

The successful management of a large institution for the deaf, like any other undertaking of magnitude and importance, requires the application of the principle of the division of labor. There is, or should be, at the head of each institution an officer whose authority, beyond such limitations as the laws of the State, or the corporation he serves place him under, should be recognized as supreme over all connected with the school. This officer requires the assistance of numerous subordinates, and he usually delegates to each of them the management of some particular department of the school, and holds him responsible for its management. He has the right to select such persons as are most capable of discharging the duties of the offices to be filled. For a steward, he requires a shrewd business man; for a matron, he wants a woman who possesses the firm and sympathetic nature required in one who is to act the part of a mother to a family of three or four hundred children; for teachers, he chooses men and women of education and of experience in imparting to others what they themselves know. Too often, however, he appears to think that the office of supervisor is of no great importance, and that its duties can be discharged by any one who can waive a handkerchief, or beat a drum to call the children to dinner, chapel, and study, and can lock and unlock a door. I do not mean to say that there are not men and women of intelligence and education who are fully capable of discharging their duties, filling the position of supervisor in many institutions, but if common report as to the salaries paid them, and the personal consideration in which they are held, is true, it shows that their occupation is regarded as menial. When one considers that, from the time when they rise in the morning till they retire in the evening, the children are for two thirds of the time under the control of the supervisor, and thinks of his great influence for good or evil over them, it is hard to understand how this state of affairs came about.

An experience of several years as supervisor of deaf boys shows that their successful management demands executive ability of no mean order; the daily exercise of greater tact and skill in settling differences than was ever called into use by a political fence-mender on the eve of an election, great quickness of decision, the avoidance of all appearance of partiality, and great firmness in the enforcement of all rules, whether made by himself or the Principal. He must also be a man of education and refinement; of education, because it is not always possible for a pupil to find a teacher when he wants aid in his studies, and the supervisor should be able to give such needed assistance; of refinement, because children unconsciously adopt the conver-

sation and manners of that adult person with whom they come most frequently and closely into contact, and a vulgar or immoral person would obviously be out of place among them.

He should be good natured, slow to anger, and able to make allowance for the youth and thoughtlessness of those under his care, yet conscious of the dignity of his position and capable of upholding it. Anger on slight provocation, worry, or impatience, will render him ridiculous, and to permit too much familiarity on the part of the pupils will lower their estimate of his importance, and diminish their respect for his authority in a corresponding ratio.

He must be kind hearted and obliging, able to sympathize with the younger children in their boyish troubles, and ready to plan for the comfort and entertainment of all.

In short, to be a *perfect* supervisor, he must possess all the virtues of all the saints in the calendar. And, in addition, he should be perfectly conversant with the language of signs. At a former convention, Mr. Brock, of Illinois, argued that the office of supervisor should be utilized as a course of preparation for teachers, through which they could become acquainted with the sign-language and the peculiarities of the deaf. This distinguished teacher evidently shares with many others a low estimate of the importance of a supervisor's position. I am inclined to think that a deaf person who has been educated in an institution, and who has afterwards pursued an advanced course of study, is the best possible person for the place; but, if a hearing supervisor is desired, he should be selected from among the corps of teachers, and should be one who perfectly understands the language of the deaf, and has associated much with them. It is not at all conducive to good order to have the pupils plotting mischief before the supervisor's face, not to speak of the inconvenience that would result from the difficulty of carrying on communication with them, and it takes many years to acquire sufficient knowledge of the peculiarities of the deaf to manage them successfully.

It may be argued that it would be impossible to find a successful teacher who would willingly perform such arduous work for so small a salary; but why not increase the salary? Is not it just as important that the pupils should be well trained in morals and manners as that they should be well educated mentally, and why should not the person who performs the former work be as well paid as the one who does the latter?

It should be the duty of the supervisor to make all *minor* rules for the government of the pupils while out of school, and to see that these rules, and those made by the Principal and Board of Directors, are obeyed. If any great innovation is contemplated, he should, of course, consult the Principal, but it adds not a little to the dignity of his position, and to the respect that will be paid his authority, for the pupils to know that the supervisor is, in reality, their guardian, and not merely a monitor whose duty it is to report to the Principal their misbehavior. No supervisor can be successful who does not possess this power. The pupils will respect neither him nor his authority. They will call him, and really consider him, a "spy" and "tale-bearer." This is, of course, very foolish, but children, and especially deaf children, *will* think and do foolish things, and allowance must be made for the fact.

For this reason, the supervisor should also have permission to punish the pupils for minor offenses when necessary. It may seem

dangerous to trust him with a power that is capable of so great abuse, and the Principal may naturally prefer to keep it in his own hands, but there is always a remedy for cruelty or injustice in the exercise of this duty, to wit: the discharge of the supervisor and the appointment of one who will exercise more discretion. Any misbehavior, however, which calls for exceptionally severe discipline, should be reported to the Principal and the punishment left in his hands.

And it is of the greatest importance that the supervisor should always be upheld by the Principal in the presence of the pupils, when a complaint is made against him, or a pupil is brought forward for punishment, even though the Principal believes that the supervisor is in the wrong, for it is discouraging to the officer and prejudicial to the cause of good order to have a pupil go out among his mates and boast that he was right and the supervisor wrong. If it is necessary to admonish the supervisor, it should be done in private, and the remedy of dismissal for continued wrong doing, whether intentional or not, always remains.

He should have charge of the study-room in the evening, for he knows the characteristics of each pupil, while a teacher very often does not even know the names of those who are not members of his own class, and, besides, there will then be one code of rules for the government of the room from one end of the school year to the other, while, if the duty is delegated to the instructors, the weekly change in the care taken will, as Mr. B. D. Pettengill has well observed in an article in the "American Annals," be likely to prevent any *regular* system of management from being carried out, the different managers often having very different ideas in regard to the extent of liberty that should be allowed to boys, and differing very much in their ability to make themselves respected and obeyed.

Besides these, the supervisor should have charge of the Sunday school, say grace in the pupil's dining-room, and if he be the right man for the place, there is no reason why he should not take turns with the instructors in conducting the chapel exercises. He should see that the pupils are always neat and clean, that every possible provision is made for their comfort, and perform such other duties as naturally come within this province.

To manage the pupils successfully the supervisor must gain their good will and affection, and their hearty coöperation in maintaining good order. If he has sufficient tact to avoid antagonizing them he will seldom be obliged to resort to harsh measures for the enforcement of the rules. There are few boys who, if treated as gentlemen, will not act as such, and politeness and consideration go a great way, even with children. When possible to avoid it, a pupil should not be reprovod or punished in public, as his dislike of appearing wrong in the eyes of his schoolmates will only confirm him in his obstinacy and bad behavior. If, however, it is ever necessary to reprove or punish publicly, the pupil should afterwards, when he has had time to cool down, be taken aside and reasoned with. This will generally remove all trace of ill-feeling towards the supervisor, and will render him much more tractable in the future.

It is well to be rather strict at the opening of the school year, in order that the pupils may become habituated to the observance of the rules. Afterwards it is wise to allow as much liberty as is consistent with the preservation of good order and the welfare of the children.

It is an aid to the supervisor to have the assistance of a number of the older pupils in the discharge of his duties, for these will have a personal interest in the maintenance of good order, and their example will be beneficial to the other pupils; but they should be selected by the supervisor, and not by the pupils, who would be inclined, by partiality and the hope of personal favor, to select their particular friends. But these assistants, not having arrived at years of discretion, and not being directly responsible for the management of the department, should on no account be permitted to inflict punishment.

Much more might be said on a subject of such vital importance, but the above salient points will, I believe, sufficiently indicate my ideas of the qualifications, rights, and duties of a supervisor of deaf boys, and of the best method of management.

Professor Gillett here took the chair.

DR. GILLETT: The next paper to be read is "The Importance of Supervisors' Work," by P. J. HASENSTAB, of Illinois.

IMPORTANCE OF THE WORK OF THE SUPERVISOR.

It is of quite recent date that the supervisor's work has been recognized to be of great importance. Some institutions, usually large ones, assign the whole charge of the pupils of each sex to one or more responsible persons of the same sex. Several institutions still retain the former system of having instructors do the work by turns. Some appoint reliable pupils to assist in the monitorial work.

It was remarked some time back by one of our Principals, that a person appointed to the office of supervisor need not be expected to know the language of the deaf as much as the instructors. Such an opinion is a great mistake, and its application unjust to the deaf, inasmuch as a knowledge of the language is not only necessary to the proper discharge of the supervisor's duties, but is also essential to the welfare of the pupils, as it is the means of their understanding him and his understanding them. How can he, without a sufficient knowledge of the language, successfully supervise, when he must always be finding something to do for those in his charge, and this must be done through the use of their language? This requirement may, however, be modified in case of his being appointed to associate with a supervisor who has already remained for some time in office, and who knows the language and the pupils well.

It may be held that instructors, because of their immediate and constant interest in the deaf, and of their acquaintance with their peculiarities of character and difficulties, acquired in their school-rooms, can best perform the monitorial work. But should we not rather say that the proper apprenticeship of a teacher is in the office of a supervisor? For by reason of the valuable experience and knowledge of the various dispositions of the deaf which the supervisor acquires, he will then certainly succeed in the higher station. An objection to instructors doing this work is that they cannot grasp the various dispositions of the pupils, because they are with the pupils only as often as their turn comes around while the supervisor is with them constantly. To be able to grasp and remember the disposition of each one of the pupils, and then to treat each one as his disposition may demand, is of great value, and is a secret to success in supervision. It may seem plausible that supervision by instructors would be

offering to pupils ample opportunities to study and become accustomed to various methods of discipline; but it is not, for they are rather too young to judge of the merits and demerits of such various disciplines. It is generally their nature to be more or less mischievous, and to look upon discipline only as something to be resisted and evaded. The good supervisor's discipline is uniform, and pupils will work day after day with much less friction under his unvarying system. He is alone responsible for the general behavior of the pupils outside of school.

Still another objection presents itself to instructors acting as supervisors. They are expected to take enough time for recreation to preserve their vigor, and to make necessary preparations for the next day's work. To add the work of supervisor to their regular work would be refusing them a large portion of time demanded for recreation and such preparation. The release of teachers from the work of supervision would enable them to use their energies in the school-rooms to much better purpose.

Pupils appointed to do the monitorial work, often look down, by reason of their office, upon their fellow pupils. Thus do they often do their work rather rashly. On the other hand, the pupils naturally do not cheerfully mind such pupil monitors, and they are slow to obey them, except when they are immediate vehicles of command from the Principal or a teacher on duty.

Pupils coming to an institution bring thither the manners and habits which they acquire at home from their folks and companions. Some are refined, others coarse, and others very rude. At home they had their own various circles of association. Here they are all thrown together into a general circle, and their manners and ways are likewise intermingled. Naturally they will soon take to coarser manners but for the kind and firm control of their supervisor. Again, they all have had different methods of home training, before they came to school. Here a general method of training is before them, and new to them, and many resist it in various ways, and need a steady and unvarying hand to overcome their restiveness. The supervisor works with instructors in developing the moral character of the pupils. In school the instructors instil moral principles and good manners, and the supervisor takes care that they practice them outside of school.

A supervisor, because of his being in constant contact with the pupils intrusted to his charge, studies and understands their dispositions, peculiarities of character, and difficulties. With a good understanding of these peculiarities he can treat the pupils more fairly, and, in thus doing, win their esteem and confidence. They feel as though they have a brother in him, and will ever obey him without question.

Hearing children, when at home from school, are under the eye of their parents and guardians. Their wants are supplied, and their doings noticed, corrected, and improved. Briefly, their physical, intellectual, and moral conditions are looked after. Deaf children, at an institution away from their parents and guardians, constantly need some one to look after their wants and doings in like manner. This duty should be assigned to a supervisor, because of his constant contact with them and because he best understands their dispositions and difficulties. It is especially desirable that he be wise, observant, and far-seeing. If he can explain to them the evils of their doings without unduly wounding their feelings, and if he can even explain

those which have been done by others older and more responsible, without weakening their esteem for the doers, so much the better it will be.

A supervisor, in order to work successfully, must be of good character; must be courteous in his manners and considerate in word and deed; must have his temper under entire control; must study the peculiar dispositions and difficulties of those in his charge; must settle their disputes quietly and kindly; must be kind, yet firm; must lead, not drive; must show himself loving in all his work; must be ready to lift them from troubles and perplexities; and must always set them a good example. Walter Scott makes Ivanhoe say, "As the leader is, so will the followers be." A supervisor is a leader, not a driver. "He who can make a constant example of his habits of courtesy and cleanliness, Christian bearing, and high aspirations for excellence of character, will be able to improve the moral condition of others."

"Example is mightier than precept." Suppose a supervisor prescribe rules of propriety for pupils in his charge, and yet fail to observe some one of them himself, even in their presence, what is the effect? If they accuse him of the "beam in his own eye," can we wonder, or will we wonder, that his influence is greatly weakened? Thus patience and care are required of a supervisor to lead pupils to observe his rules. Let him exalt his office; command the respect of the pupils for it; remind them repeatedly that the supervisor is their leader; entreat them to aid him in whatever he may wish to do for their own good.

At the last convention, held at Jacksonville, Illinois, it was inquired "whether pupils give the respectful obedience to the commands of a supervisor that they are accustomed to give to those of a teacher, and whether it is best for the good order of an institution and the government of pupils" that supervision should be committed to teachers or to supervisors. I will try and give an answer to the first question, partly from my experience both as a pupil and as a supervisor, and partly from my observation. It depends on the nature of the command itself, on the manner in which it is given, and on the person giving it. It may be unnecessary to state these three conditions more fully than to say that a just command, well given, given by a well trusted person, would be cheerfully and respectfully obeyed. Not long ago a lack of acquaintance with the language of the deaf in the supervisor at a certain institution was the cause of serious trouble among the boys. At the Ohio institution there were once two hearing supervisors whose parents were deaf-mutes, and they had little trouble in their work. Again, there are two deaf supervisors at the Philadelphia institution, and they are doing very finely. Similar examples may be found in some other institutions. These examples may testify in favor of monitorial work by supervisors, and by supervisors acquainted with the sign language.

The first portion of this paper may serve for a response to the other question.

Observation and experience seem to show that deaf persons, once pupils at an institution, when wisely selected, are able to work more satisfactorily, by reason of their own experience with supervisors when themselves pupils, and of their knowing what should be done and what should not be done. But for certain reasons we would have hearing supervisors also. For an institution that can afford to have

two or more supervisors of each sex, it would be advisable that at least one of each sex should be a deaf person.

THE CHAIRMAN: The next paper is "Work Done in the Pennsylvania Oral School," by Miss EMMA GARRETT.

A SUMMARY OF WORK DONE IN PENNSYLVANIA ORAL SCHOOL FOR DEAF-MUTES, SCRANTON, PENNSYLVANIA, JUNE 18, 1886.

My school is at present a day school. It practically began September, 1884. It consists of thirteen pupils ranging from six to fifteen years of age. We have received many applications but can only admit at present such pupils as can attend as day pupils. We hope to receive State aid next year to enable us to establish a boarding school, as that seems to be the need of the locality in which our school is. I prefer day schools when practicable.

I am the teacher as well as the Principal of the school. There are eight pupils in one class, three in another, and two that require individual instruction. Owing to sickness and other causes, the average time that the most advanced class—consisting of eight pupils—has been under oral instruction, is about fourteen months; two of them had had some instruction in signs, and are consequently behind the rest of the class in speech.

My principal work has been to develop speech and language. If this work is well begun it will be a comparatively easy matter to instruct them in the ordinary English branches later. The pupils in this class talk with much freedom. They commenced arithmetic nine months ago and are all now able to do simple work in addition and subtraction. I have no period for original composition or letter writing yet, but encourage the children to talk constantly and correctly; and when they have any spare minutes, six of them are very ambitious to write letters, and from the fact that they are acquiring considerable language, they make creditable attempts. They have not been instructed long enough to enable them to write without some grammatical errors, but they touch upon many different subjects and nearly all their letters are intelligible in meaning, well written, and correctly spelled.

They write a great deal from dictation. The eight pupils referred to read my lips very well, and some of them read each other's lips well. Two of them lost hearing by sickness after acquiring some speech—one at six years of age and one at seven. One retained good speech, although his voice was weak; that of the other was imperfect. The first entered December 10, 1885. He has been taught a little geography since then. It is my intention to begin geography with the other seven next September. The work of the other pupils, most of whom have only been in school a few months, is in the same direction as the class of eight, but they are not, of course, as far advanced. One pupil has made but little progress, but I have not yet determined whether there is any mental deficiency, or whether he is only backward.

I have no pupils who had enough hearing to learn to talk before coming to school, but one girl has since developed considerable appreciation of sound. Two young pupils who entered recently give promise of being subjects for aural training.

Three of the pupils did not begin to learn to talk until they were fourteen years of age. We shall not see the best results of oral method until this work is begun earlier, and parents of deaf children

understand that they should treat their deaf babes *exactly* as though they heard, except that they should let the deaf *infant see words on their mouths many times where they would repeat them many times to the ear of the hearing infant.*

It has grieved me to learn that directions have been issued to parents, advising them to teach signs instead of spoken words to young deaf children, when there are instances on record that prove that their future speech would be so much better if they were early taught to speak.

If the school were larger I should classify it as I did in oral branch of Pennsylvania institution—placing semi-mutes, semi-deaf pupils, and congenital and practically congenital, each in separate classes; of course, sending semi-mutes and semi-deaf pupils to hearing schools as soon as possible. I sent a semi-mute from our school to a hearing school last September. (See "A Deaf Pupil in a Hearing School," January, 1886, number of "American Annals of the Deaf.")

Admirable as were the decisions of the Milan International Convention in 1880, I feel that not only should all new pupils be given oral method as it suggested, but that many pupils in sign schools could still attain to an intelligible speech and considerable facility in lip reading, if they were entirely removed from sign communication and surroundings. I would save every *new* pupil to oral method, but I know it to be possible to redeem many of the *old* ones, too.

The following programme of our closing exercises, held on June 26, 1885, may be of interest. The average time that class taking part in exercises had been under oral instruction was six months at that time; there was but one semi-mute member of the class, and she was not able to be present at the closing exercises.

Class gave dates—day of week, month, and year; number of days in a week; names of days; school days; days spent at home; number of months in a year; names of months; names of spring, summer, fall, and winter months. Names of last month, this month, and next month, each pupil in class repeating the answers in turn.

A clock face was drawn on the blackboard without hands. In same, each pupil drew hour and minute hands at certain times suggested by persons in the audience, and then told in speech what time it was, afterward writing it on the blackboard; for example, "It is twenty-five minutes of three o'clock."

Class counted up to one hundred—one pupil repeated the numbers to ten, the next to twenty, and so on.

Class wrote from dictation vowel sounds, marking with Worcester's dictionary marks, and also words containing all consonant sounds.

Class performed following actions and directions given from lips.

Walk to the door.

Stand up.

Run to me.

Come to me.

Point to the blackboard.

Go to your seat.

Touch the desk.

Shut the window.

Sit down.

Open the window.

They made following answers to the question, "What can you do?"

I can see.

I can jump.

I can talk.

I can sweep.

I can think.

I can laugh.

I can smell.

I can play.

I can walk.

I can sew.

I can run.

I can pick slate (in a coal breaker).

Class made following requests in speech:

Mamma, please give me a glass of water.
 Mamma, please give me a piece of bread.
 Mamma, please give me a piece of pie.
 Mamma, please give me a cup of coffee.
 Mamma, please give me a cup of tea.
 Mamma, please give me a glass of milk.
 Mamma, please give me some sugar.
 Mamma, please give me a piece of butter.
 Mamma, please give me a piece of meat.
 Mamma, please give me a piece of potato.
 Mamma, please give me some salt.
 Mamma, please give me some pepper.
 Mamma, please give me a knife.
 Mamma, please give me a fork.
 Mamma, please give me a spoon.
 Mamma, please give me an apple.
 Mamma, please give me some molasses.
 Mamma, please give me some candy.

One pupil was asked, "Do you like apples?" She replied, "Yes, I like apples." "Do you like coffee?" "No, I do not like coffee."

Another was directed: "Put the book *on* the table;" "Put the book *under* the table."

Another was told: "Bring me the book;" "Take the book to Ella."

Another was asked in speech, "What have I in my hand?" Reply was: "You have a pencil in your hand." "What is that?" Reply: "That is a rubber."

"Whose rubber is it?" Reply: "It is Miss Garrett's rubber."

"Which book do you wish?" Reply: "I wish the red book."

Class took turns in speaking names of colors and pointing them out.

Pointed out square, round, and oblong objects.

Class spoke names of different pieces of money.

1 cent.	10 cents.
2 cents.	25 cents.
3 cents.	50 cents.
5 cents.	\$1.00 (one dollar).

Played store with cake and candy, one acting as buyer and the other as seller. Spoke the following:

"Please give me five cents worth of candy."

"Please give me five cents worth of cake."

Spoke names of some parts of the body in turn, and pointed them out in answer to spoken directions:

Show me your mouth; lip; head; eye; arm; ear; thumb; chin; neck; finger; back tooth; cheek; hand; side; nail; nose; foot; toe; knee; leg; face; tongue; elbow.

And some common articles of clothing: coat; necktie; cuff; vest, or waistcoat; shoe; handkerchief; pantaloons, or trousers; slipper; dress; shirt; glove; stocking; collar; button.

Class pointed out following in answer to direction:

Show me—

A strong man.

A little dog.

A red bird.

A white shawl.

A new shoe.

An old shoe.

A wide room.

A narrow room.

A yellow chair.
 A green leaf.
 A blue dress.
 A large stove.
 A small house.
 A tall woman.
 A short woman.

A sick girl.
 A weak girl.
 A pretty girl.
 A good girl.
 A good boy.
 A long bench.

Class wrote the following, dictated from lips:

That dog is fierce.
 That box is heavy.
 That book is rough.
 This book is smooth.
 That house is ugly.
 That house is high.

That apple is sour.
 That colt is wild.
 That knife is bright.
 That boy is angry.
 That cow is good.

Pupils went through exercises correctly and quickly.

The following is the programme of closing exercises on June 18, 1886, of same class after fourteen months oral instruction.

Class in turn wrote following on blackboard, dictated to them:

"We are glad to see the ladies, gentlemen, and children."

"School closes to-day, Friday, June 18, 1886. We shall have no school in July and August; — we call it our summer vacation."

"All the pupils in our class will talk every day to our fathers, mothers, brothers, sisters, and friends, and be helpful to them while at home."

Class did examples in addition and subtraction on blackboard, dictated in speech.

Examples of aural work. A child who did not speak a year and a half ago answered some questions through hearing as follows:

"What do I teach you?"

"You teach me to speak, to hear, and many other things."

Class gave a short account in speech of what men do in Prang's Pictures of Trades and Occupations—printer, farmer, gardener, tailor, shoemaker, blacksmith, housebuilder, carpenter, etc.

Class gave a number of examples of persons or people, things, animals, birds, fish, insects, reptiles, fruits, vegetables, flowers, and trees. Also wrote a number of examples of each.

Questions for the one pupil referred to who had received a little instruction in geography since January, 1886:

What do you understand by direction?

What are the four principal directions?

Point to them?

What else must we know beside direction of a place to find it?

What are some of the measures we use for short distances?

What are some of the measures we use for long distances?

Which measure should you use to find size of our school-room?

What is the size of it?

How many inches make a foot?

How many feet make a yard?

How many yards make a rod?

How many rods make a mile?

What is the principal street in Scranton?

In what direction does it run?

How far is it from our school, and in what direction?

Name two streets that have the same direction as the principal street?

Name two streets that cross it.

In what direction do they run?

What are the principal natural divisions of the earth?

What State do you live in?

What county is your school in?

What city is your school in?

Bound Pennsylvania.

What mineral is found in large quantities in and near Scranton?

What are the vertebrate animals? Give examples.

What are the articulate animals? Give examples.

What are the mollusk animals? Give examples.

What are the radiate animals? Give examples.

The semi-mute pupil whom I sent to a hearing school last September kindly consented to come to closing exercises and let the audience see his perfect ability to read the lips. He speaks German also, and reads it on the lips.

A lady of fifty years of age whom I have given private lessons in lip reading this winter also consented to allow the audience to see her read my lips. She could not understand me at first lesson. She now reads almost everything I say, rarely missing a word.

In my paper entitled "A Plea that the Deaf-Mutes of America may be Taught to Use their Voices," read before the Tenth Convention of American Instructors of the Deaf, held in Jacksonville, Illinois, in August, 1882, I said that I felt that there was but little to add to the evidence that we already had in favor of speech for the mass of the deaf, little thinking that four years would roll by and find the majority of the deaf children of this great and beneficent Government still under sign instruction.

It is true that a few new oral and aural schools have been started since then: my late school—the Oral Branch of Pennsylvania Institution for the Deaf and Dumb—which I established in Philadelphia in October, 1881, grew while under my charge to be a school of nearly eighty pupils in two and a half years, nine classes being formed in that time; the Voice and Hearing School for the Deaf, Englewood, Illinois; the Milwaukee Day School; Miss Mary S. Garrett's Oral School for the Deaf, No. 7 S. Merrick Street, Philadelphia; and my present young school in Scranton. But although thankful for these, I long for the time when *pure oral instruction* shall be general.

I cannot be satisfied while fifty-two out of sixty-four schools and institutions for the deaf in the United States employ the old sign system or combined system.

The Abbé Tarra, President of the International Congress of 1880, has had nearly thirty years' experience in teaching the deaf, first by sign method, then by combined method, and latterly by the *pure oral*. He says: "All deaf mutes capable of being taught by means of signs are capable of being taught by means of speech, without exception." He further says, that children who are being taught by oral method should be kept absolutely away from signs and the manual alphabet.

These true words cannot be quoted too often. We occasionally hear of deaf children who seem unable to learn to talk. This may be on account of mental deficiency or simply because the child is slower in learning and developing than others. In the latter case more teaching and training than is necessary for the ordinary child must be given in order to accomplish the result.

THE CHAIRMAN: We can now take a few minutes for the consideration of these papers.

MR. WALKER: I move that we defer discussion upon these papers until after the report on necrology is made.

This motion was seconded and carried.

THE CHAIRMAN: We now come, my friends and comrades, to the performance of a very melancholy duty. Who knows for which ones of us this duty will be performed at the next convention? There are familiar faces in my mind now, for they have been engraved on my heart, that we cannot look upon, and yet, I am accustomed so to believe and I feel, that though we see them not, still they are with us, and they see us. They know very much better than we know, the solution of those questions that we are endeavoring ourselves to solve. They have reached that place where the ear is indeed open, where the dumb tongue is indeed unloosed, and their interest in the work here is not lost because of their knowledge of the work beyond. The work is all one; life is one. This is but the ante-chamber of the real life. We are all in the primary school, and it will not be very long until we shall all of us be graduated into that one that is higher.

One of our American poets has said:

"There is no death. What seems so is transition.
This life of mortal breath is but the suburb of the life elysian,
Whose portal we call Death."

Those whom we shall try to honor to-day, did well their work. May we be able equally well to perform ours, and to follow on in their footsteps. I will now call upon the Chairman of the Committee on Necrology, Professor Job Williams, to present his report.

MR. WILLIAMS: Prof. E. A. Fay will read the notice of Miss Annie E. Bond.

PROFESSOR FAY: This notice was prepared by Miss ELLEN BARTON, who asks me to read it.

MISS ANNIE E. BOND was born in ———, in the year ——. She entered the Horace Mann School in Boston in January, 1870. She had already given years of devotion to the instruction of a young lady, a confirmed invalid, who was both deaf and blind. Miss Bond's character was a rare combination of both sweetness and strength—a rich outgrowth of native talent and an inheritance from one of Boston's oldest families. Her merits as a teacher were of a high order. Gentle but firm, generous but just, she commanded respect and inspired devotion to an extraordinary degree among her pupils, and possessed to the fullest extent the confidence of her associates. She held for many years the position of head assistant, sharing in a peculiarly helpful manner the arduous duties of the Principal, and from her large acquaintance with persons of culture and wealth gained for the school and the cause many valuable friends. Her Christian self-devotion to her friends was evidenced by the heroism with which she bore about in her frail form for years the seeds of death without calling for sympathy or shadowing the lives of those who loved her best, with the knowledge of an approaching doom which was early revealed to her.

Her sudden death was a severe blow to the large circle of friends, and an inestimable loss to the school to which she had given fourteen years of the best years of mature and Christian womanhood.

Edward Everett Hale, her beloved pastor and friend, voiced the

sentiments of all who knew her when over her casket he said the world was better for her having lived.

The following obituary notices were then read: Joseph H. Ijams, of Tennessee; Adolphus K. Martin, of Louisiana; Madame Victorine Bouche, and Harriet E. Coggeshall; Benjamin P. McKinley, Miss Mary A. Ziegler, J. A. McWorter, Miss Cornelia Trask, Miss Katie Getty, Miss Jennie C. Cramer, John R. Keep, J. D. H. Stewart, and George A. Shoaf.

JOSEPH H. IJAMS was born in Rushville, Ohio, December 11, 1840, where his parents had lately moved from Maryland. During the connection of his brother, Rev. W. E. Ijams, with the Iowa institution, Mr. Ijams became interested in the cause of deaf-mute education and acquired a clear and graceful use of the sign language. He was, in turn, a teacher in the Iowa school and in the Columbia institution at Washington, D. C. In 1866, upon the reorganization of the Tennessee school for the deaf and dumb, which had been closed during the war, Mr. Ijams was chosen to take charge of that institution. The task before him was no easy one. The buildings and grounds having been occupied successively by the contending armies for hospital purposes and otherwise, were defaced and unsightly, all furniture and school appliances were destroyed or carried away, and the whereabouts of former pupils or other deaf children unknown; but Mr. Ijams went at the work before him with an enthusiasm and energy rarely equaled, and soon his untiring efforts, seconded by a wise discretion, resulting in the building up of a flourishing and well ordered school; the whole administration of which was alike creditable to his head and heart. Mr. Ijams possessed rare executive ability, and while he was a man of decision and firmness, his courtesy and kindness toward pupils and assistants made it a pleasure on their part to carry out his will.

His ability and gentlemanly demeanor won for him, at once, the confidence and coöperation of the Board of Trustees of the Tennessee school and they heartily supported him in his arduous work. To the pupils of the institution he was a kind and loving father; to the people among whom he had cast his lot he was always a gentleman—a friend; to his own family his death has been an irreparable loss. After more than sixteen years of faithful service to the State, to humanity, and to God, he fell asleep on December 24, 1882. It may truly be said that he rests respected, beloved, and lamented.

ADOLPHUS KERR MARTIN was born and reared in Mississippi. He received a classical education, studied for the ministry, and devoted several years of his young manhood to the work of a colporteur and missionary for the Presbyterian Church, in the remote settlements of the Southwestern States and Indian Territory.

In 1855 Mr. Martin was elected teacher in the Missouri Institution for the Education of the Deaf and Dumb. Two years later he was called to the Superintendency of the Mississippi institution, which position he retained until 1861, when he took charge of the Louisiana institution. Owing to disturbances growing out of the civil war the school was closed in 1862, and was not again opened for four years.

During this time Mr. Martin remained at Baton Rouge, taking care of the buildings and grounds of the institution. He then returned to his former home in Mississippi and engaged in agricultural pursuits until called again in 1871 to the position of teacher in the Missouri institution. For nine years he labored faithfully and suc-

cessfully in the class-room, and for six years of this time discharged the additional duties of Assistant Superintendent.

In 1880 Mr. Martin was again appointed Superintendent of the Louisiana institution. Returning to his former field of labor, he entered upon the discharge of his duties with great zeal and with a determination to bring the school up to its former efficiency. But an insidious disease had marked him for its victim, and in less than two years he was compelled to retire from the vocation which had engaged, almost continuously, twenty-seven years of his life.

He died at Natchez, Mississippi, in the autumn of 1882, surrounded by near relatives and sympathizing friends. His sufferings were prolonged, and at times were very great, but he bore them all with fortitude, and entered into his heavenly rest with the calm confidence and blessed hope that attends the dying Christian.

W. S. MARSHALL.

July 21, 1886.

MISS HARRIET E. COGGESHALL, the subject of this imperfect sketch, was born at her father's consulate in the city of Quito. His death occurring soon afterward, the entire charge of her education devolved upon her widowed mother, a woman of marked force of character. In the fall of 1881, Miss Coggeshall took her place as one of the younger teachers in the Ohio institution, to fill a vacancy in the oral department, under the tutelage and advice of a more experienced associate. In this somewhat trying field of duty, she labored with more than average success, endearing herself by her gentle and winning bearing to pupils, fellow teachers, and officers alike. Always delicate in physique, her failing health compelled her, in the spring of 1883, reluctantly to leave her post, never to return. Her death, at the home of friends in a neighboring State, followed within a few weeks. Success not being measured by length of service, in the early demise of Miss Coggeshall we recognize a loss to the profession at large, as well as to the immediate circle which, in life, she graced.

BENJAMIN B. MCKINLEY AND MARY E. ZIEGLER.—Since the last convention, at Jacksonville, Illinois, two teachers connected with the Pennsylvania institution in Philadelphia, Benj. B. McKinley and Mary E. Ziegler, have passed away.

Mr. McKinley, at the time of his death, and for some time before it, was not actively connected with the work, having been retired on account of feeble health in 1875. In his retirement, however, he continued to manifest a deep interest in the welfare of the deaf, among whom he had lived and labored for upwards of forty years, and made frequent visits to the institution till physical infirmities forbade his venturing out of his room. He was a faithful teacher, a devout Christian, and patriotic citizen. Mr. McKinley died on the twentieth of July, 1883.

Miss Mary E. Ziegler, a valued teacher, died November 15, 1883, at her home in Carlisle, Pennsylvania.

The following sketch of her life, from the "Annals," January, 1884, was prepared by Mr. Henry S. Hitchcock, one of her associates:

Miss Ziegler was born near Carlisle, February 7, 1852. Her ancestors were among the first settlers of that part of Pennsylvania. She became connected with the Pennsylvania Institution for the Deaf and Dumb, as teacher, in the autumn of 1875. She was prepared for

the general work of teaching at the State Normal School at Millersville, Pennsylvania. She was specially fitted for the work of instructing deaf-mutes by having two deaf-mute brothers, to whom she had devoted much attention and care. In this way she had become acquainted with the sign language and manual alphabet, and had learned to sympathize with and to understand the nature and needs of the class of children among whom she was called to work. At first, like other young teachers, she met with disappointments and failures. But she was not disheartened; she bravely determined to correct her mistakes, as far as possible, and endeavor to reach success. After much patient toil her efforts were crowned with gratifying success. Three classes were under her instruction. The pupils in the last two were remarkable for their intelligence and correct use of language. This was not accomplished by the use of any novel methods, but by the persevering and careful employment of methods long in use in this institution. She pursued a natural, systematic method, characterized by great simplicity. Her influence upon the moral nature and deportment of her pupils was good. In this she possessed the advantages of a commanding presence and dignified demeanor before her class, while by her kindness, firmness, and sympathy she won the love, respect, and confidence of her pupils, devoting herself sincerely and earnestly to their welfare, and attending to their little as well as important wants with a motherly interest. It is not too much to say that she was thoroughly devoted to the work for which she sacrificed her life. She entered the institution apparently in robust health, but ere long over-exhaustion, anxiety, and too close confinement told on her constitution, and she declined in health until it became quite broken down. Several times before her last sickness her friends felt anxious about her, but she seemed to recover fair health, and was hopeful of recovery almost to the very end of her life.

Miss Ziegler was a very kind, sincere, and sympathetic friend. To her family she was devotedly attached, an affectionate daughter and a kind and generous sister. Her religious character was quiet and unobtrusive. She was a member of the Lutheran Church, a sincere Christian, and we trust has gone to receive the reward promised to those who are faithful to the end.

JOHN ALLEN McWHORTER was born in Warsaw, Wyoming County, New York, September 15, 1833, and moved to Wisconsin in 1850. He entered Beloit College at the age of nineteen and maintained a high standing as a scholar and a Christian man through his entire course. At the age of twenty-three, upon the suggestion of President Chapin, of Beloit College, he became a teacher of the deaf in Wisconsin, and died with the harness on. The greater part of his work was in Wisconsin, where he is known as a strong and vigorous man, thorough in all his work. He was a good sign maker, a faithful, earnest, successful teacher, and a true friend of the deaf and dumb. In November, 1869, he was appointed Superintendent of the Louisiana institution, in Baton Rouge, and to this school he devoted some of the best years of his life. His fidelity to the cause of deaf-mute education in Louisiana, and his earnest, energetic efforts in that State to preserve to the deaf the grounds and buildings provided for them by the State, no one at the north can adequately appreciate. Although his efforts proved ineffectual, he still watched his opportunities to aid the cause, and, in 1880, was induced to accept the office of Principal of the Western Pennsylvania institution, Turtle Creek, and to his

work there brought all the strength and wisdom of his ripe manhood, and twenty-one years in the service of the deaf.

But his work here was of short duration, for, January 14, 1883, he died, as the Christian dieth, full of hope, and in the bright assurance of a glorious resurrection.

Mr. McWhorter was no ordinary man physically, mentally, or morally. He was strong, sympathetic, gentle, and above all that was mean or trivial. In the defense of what he deemed right he was uncompromising. Seeking the honor of God and the welfare of man he spared not self, nor yielded to the wishes of those from whom he differed. His record is written in golden deeds, pure motives, and heavenly thoughts, and his example is worthy of emulation.

MISS CORNELIA TRASK.—Since the close of the last convention two lady teachers, who were then connected with the Illinois institution, have laid down their burdens and passed on to the better land.

Miss Cornelia Trask, the first removed by death, was born and educated in Hartford, Connecticut, and began her labors as an instructor of the deaf in the Indiana institution in the year 1856, and also spent a few years teaching the deaf in New York, and in Memphis, Tennessee, coming to Illinois in the year 1859. Here she taught for a period of twenty-five years, where her life work was performed.

When the teaching of articulation began to attract notice the Illinois institution was among the first of the older American schools to take up that branch of instruction, and Miss Trask was appointed to take charge of the new department. She was soon sent by the Illinois institution to Hartford to take a course of instruction under Prof. Graham Bell. Returning to Illinois, she entered with great zeal, hope, and energy her new field of labor, from which remarkable results soon followed.

Having taught for several years by the sign method, in the use of which she was an adept, and taking into account her later and varied experience, she was, doubtless, at the time of her death, without a superior in the practical work of deaf-mute instruction.

Miss Trask possessed a keen appreciation of the relation of one method to another, and showed wonderful tact in using each in its proper place.

Miss Trask was a woman of unusually strong and upright character, of a cheerful temperament, and a consistent, devoted Christian. Her death occurred November 22, 1883, after a brief illness. Her last hours were calm and peaceful, as she bowed with perfect resignation to the Divine will. In her death the mutes of Illinois have lost a friend and benefactor.

MISS KATE A. GETTY, for three years a teacher of articulation in the Illinois institution, died in Jacksonville on the twenty-fourth of April, 1885.

Miss Getty was a native of Genesee, Illinois, where her infancy and girlhood were spent. She came of noted parentage, her father's relatives having founded the now historic town of Gettysburg, Pennsylvania, and her mother being related to the family of General Meade, the commander of the Union forces at the battle of Gettysburg.

In 1882, Miss Getty graduated at Wellesley College, Massachusetts, and, being desirous of employing her talents to some useful purpose, she began to seek a field of labor. Devotion to a deaf sister led her into this peculiar work, in which she sacrificed her young life. As a teacher she was most conscientious and untiring, throwing her whole

strength into her work. She was quick in acquiring that skill so necessary to success, and possessed, for one so young, excellent judgment in devising ways and means for overcoming difficulties in her special line of work. Miss Getty was well fitted by natural gifts and education to be a teacher of youth. Modest in demeanor, refined in manner, ever alert to the call of duty, a sincere disciple of the Master, she cast a sweet and helpful influence on pupils and associates.

It may seem sad that a life so full of promise should be extinguished in early womanhood, yet we feel assured that her life, though short here, was not in vain, for it may be said of her, through those to whom she gave speech, "She, being dead, yet speaketh."

After an illness of three weeks, her gentle spirit passed quietly away, like the beautiful star on the "brow of night." The following day the mortal part of Miss Getty was conveyed to Sharon Cemetery, near Genesee, and laid to rest by the grave of her father.

MISS JENNIE CRAMER.—The Iowa institution sustained a severe loss in the fall of 1883, by the death of one of the lady instructors, Miss Jennie Cramer. Miss Cramer was a semi-mute, a graduate of the Minnesota school, and a teacher there previous to her connection with the Iowa school. She was a lady of rare sweetness of disposition, a successful instructor, an unusually clear and graceful sign maker. Her influence among the pupils was always for good. When the news of the probable speedy and fatal termination of her lingering illness—consumption—reached the Iowa school, it saddened all hearts. But the thought that they should never meet her on earth again was tempered by the comforting assurance that her spirit had gone where it would continue the development of loveliness begun in this life, and that the mourners were themselves selfish to bewail their own loss, when it was compensated by her great gain.

JOHN ROBINSON KEEP was born in Longmeadow, Massachusetts, May 10, 1810. He was the son of a farmer, and was expected to remain upon the farm, but he desired to obtain a collegiate education, and entered Yale College with the expectation of preparing for the ministry. After graduating in 1834, he was for a year a teacher in the New York Institution for the Deaf and Dumb, of which Dr. H. P. Peet was Principal. The two following years were spent in theological study, and he decided to go to China as a missionary, but an acute inflammation of the eyes compelled him to relinquish this. On regaining a measure of strength, he began preaching at Unionville, Connecticut. In 1842 he was installed pastor of the Congregational Church in Franklin, Delaware County, New York, and in 1844 he was settled in Warren, Connecticut, where he remained for about seven years, when an attack of serious illness compelled him to cease preaching. In the fall of 1852 Mr. Keep accepted an invitation from Mr. Collins Stone, then Superintendent of the Ohio Institution for the Deaf and Dumb, to become a teacher there; but in the autumn of 1854 he became a teacher in the American Asylum at Hartford Connecticut, and remained in this position for twenty-six years, till in 1880 ill health caused him to resign. His death occurred at Hartford on the fifteenth of June, 1884.

Mr. Keep was possessed of sound sense and good judgment. His ready wit, knowledge of human nature, and especially his genial and sympathetic disposition, gave him success in dealing with men, and no less with children and pupils. In relation to his fellow men he was governed by a fine sense of justice and honor. His natural cheer-

fulness and his faith in God enabled him to look upon the bright side. His genial and spontaneous humor was refreshing and pure as a mountain rill. His quick and far-reaching sympathy was often extended to the poor and needy.

To the church in Hartford, of which Mr. Keep was an office bearer, his death was a great loss, for he was one of its founders, and his varied and unstinted self-bestowal was of unusual help to the pastor and people.

As a teacher of the deaf and dumb, Mr. Keep was enthusiastic, patient, and persevering. He had a tender and fatherly interest in his pupils, and daily carried into the school-room the sunshine of his own nature. In conducting religious services he was fresh, lucid, and practical.

Nor were Mr. Keep's services to the deaf limited to his own class and his own institution. His communications to the "Annals," though not numerous, were quite important, and his participation in conventions was profitable to all.

Mr. Keep published two books. One, "First Lessons for the Deaf and Dumb," the result of his own careful experience in the school-room, was welcomed at home and abroad; the other, entitled "School Stories," was designed for hearing and deaf children alike.

To know him was a privilege; to have had his confidence and friendship is a constant benediction.

MADAME VICTORINE BOUCHER, who died in April, 1883, was a French Catholic lady, who presided over the St. Joseph's Institute for Deaf Mutes at Fordham, New York, for thirteen years. She was beloved by teachers and pupils. At her request, no biography has been written. Madame Boucher, assisted by a number of charitable ladies, established the school for deaf-mutes at Fordham, New York, in the fall of 1869. Although in the beginning the undertaking had to struggle with great difficulties, and but for the loans advanced by friends from time to time would have sunk under the weight of its pecuniary difficulties, yet before her death she had the satisfaction of seeing the institution in a flourishing condition, with a branch house for girls in Brooklyn, and one in Throgg's Neck, New York, for boys. By an Act passed by the Legislature June 2, 1877, it was placed on a footing with kindred institutions in the State.

ROSWELL H. KINNEY, born in Oswego County, New York, April 29, 1822, died suddenly at Austin, Texas, November 20, 1885. A graduate of Hamilton College, New York, he accepted the appointment of teacher in 1852 in the Ohio Institution for Deaf-Mutes at Columbus, and there remained from 1852 to 1863. He then entered upon the pioneer task of organizing and administering the Minnesota institution at Faribault, and was so occupied until 1866. In 1867 he resumed the work of teaching in the Ohio institution, and so continued until his acceptance of the superintendency of the Nebraska institution at Omaha in 1871. The cares and responsibilities of this office he sustained for seven years. In 1880 he had charge briefly of the affairs of the Colorado institution, at Colorado Springs. In 1881 he was appointed Principal of the Texas institution at Austin, and so continued until 1885, nearly to the date of his death at his home in Austin, after full thirty years of active service. He was a man of great earnestness and industry, and also of commanding conscientious principle. He loved deaf-mutes, and was laborious and self-sacrificing in their service. He availed himself of all opportunities of normal

improvement, and sought always, abandoning the valueless and the worn, to be in the front rank of instructors of the deaf.

JOHN D. H. STEWART.—Among the specimen work of pupils embodied by Superintendent Stone in his report of the Ohio institution for the year 1853 may be found a carefully written little sketch of John Sobieski, evidently the painstaking production of one congenitally deaf, and signed "J. D. H. S., fifteen years of age, and under instruction five years." This is the earliest trace accessible to the writer of this brief memoir of one whose death, untimely from our human point of view, saddened the westward progress of many delegates to the Eleventh Convention of American Instructors of the Deaf—John D. H. Stewart, of Ohio. Among the earlier graduates of the Ohio institution he afforded a living example of what could be accomplished by the pioneer instructors of deaf-mutes in this country when their efforts were seconded by conscientious self-help on the part of the pupil.

As a student and as a teacher Mr. Stewart was notably a hard worker. His mind was one not contenting itself with aught short of exact knowledge, exactly expressed. So far did this bent carry him that, as the writer well remembers, on his recall to institution work as an instructor by Superintendent Fay in 1868, Mr. Stewart had to a great extent lost his facility in signs through disuse, obviously preferring dactylology as a more precise, if less rapid, vehicle for his thoughts. He soon yielded to the pressure of circumstances, however, and, aiming less at grace of pantomime than at force and directness of expression, swift and energetic sign converse became characteristic with him. Ever a keen and careful observer, he excelled in portrayals of life and character. Of solid build physically, his intellect delighted in handling solid facts and impressing them upon the minds of his pupils; always ready with anecdote or narrative to beguile the tedium of class-room toil. A man of extensive reading, and possessing to a degree attained by few of the congenitally deaf in our country a ready command of clear and idiomatic English, his self-acquired knowledge enabled him to stand shoulder to shoulder with his liberally educated coworkers.

In his love of nature and research after fact Mr. Stewart was an enthusiast. Indeed to this trait of his character may be traced the causes hastening his death. He had looked forward to this trip across the divide in pleasant company with the keenest anticipations of enjoyment. Starting in his eagerness in advance of the main body of excursionists, he joined them when well en route, and from that time on, till this journey of a day and his life pilgrimage together reached their close, he was among the foremost in every sight-seeing enterprise. Realizing from his first prostration that the end was very near, he met the inevitable with Christian fortitude, and while gratefully accepting the ministrations for his relief so freely, and, alas! so unavailingly rendered by his friends and traveling companions, his spirit calmly passed beyond that greater divide, so inscrutable and yet so narrow, that separates us all from the realities of eternity.

Occupying as he did a field peculiarly his own, his Alma Mater cannot but feel his loss. And though his work may be taken up by another, linking as he did "things old and new" in the history of the Ohio institution, John D. H. Stewart may justly be classed among

those of whom it may truly be said, "We shall not look upon their like again."

GEORGE ANTON SHOAF.—July twenty-first will be remembered by the delegates to the convention at Berkeley as the closing day of a brilliant session. On that day, at half-past six o'clock in the morning, George Anton Shoaf, a delegate accredited to the convention, but who never took part in the proceedings, died. Three weeks before, he had caught a cold which resulted in an abscess of most aggravated form. It was his hope to recover in time to grasp once more the hands of the old friends he once knew at the New York institution. But a complication that baffled medical skill set in, and the fatal moment came.

He was twenty-two years old, having been born in Omaha, Nebraska, in 1863. At the age of seven years he lost his hearing through scarlet fever. In his case we see one of those fireside heroisms where a mother nurses back to life a child whom doctors have given up. At eight years old he went to the New York institution and stayed two years as a boarder in Dr. Peet's family. His parents moving to California, he entered the institution there in 1875. Eventually he entered the class of '86 at the State University. But a course at the University calls for an indomitable pluck which was not his, and he began his junior year only to give up the course for a position at the institution as supervisor. He was popular among both the boys here and the students there. Up to the time of his death he belonged to the University football team which now holds the State championship flag. Yet the young man with broad shoulders and biceps like a Samson, was summoned before his time. His death, in the flower of his youth and the beginning of his usefulness, is one of those inscrutable providences to which we bow in humble submission, without seeking to know the reason of Him who doeth all things well.

MR. WILLIAMS: Considering the circumstances of the death of J. D. H. Stewart, of Ohio, it has seemed proper to offer the following resolution:

In view of the sudden and untimely death of Mr. J. D. H. Stewart, at Salt Lake City, Utah, July 12, 1886, while en route with us to attend this convention—

Resolved, That we extend to his bereaved wife, in her unspeakable desolation and sorrow, our tenderest interest and sympathy.

That in his death we deplore the termination of a life eminent in its success and usefulness, and in its unobtrusive exhibition of the best traits of Christian character.

That in the fatal issue of his sickness, anticipated by him, and yet not feared, we recognize, humbly and submissively, the dark cloud ever attendant upon human frailty, yet with him not unlighted by the bright reverse of heavenly hope.

That a copy of these resolutions be transmitted to his bereaved wife by the President of this convention.

DR. I. L. PEET: I can say from the fullness of my heart that Dr. William Porter rendered a very great service to the New York institution, by taking it when the sanitary conditions were imperfect, and bringing it to a condition in which there was no public institution in the city, or in the State, which was superior to, if equal to it. He was a man of fine personal presence, of very kind heart, very sympathetic, and inexorable in the discharge of what he considered his duty, but always endeavoring to make life in the institution pleasant to the pupils and to the teachers. My relations with him were of the most agreeable character; and, whether it was the grace of God in him, or in me, that made a delightful association of ten years in the New York institution, under what has been called two heads, it is

certainly the case that that institution was admirably conducted, so far as he was concerned, in every respect, and that I was enabled, through the association with him, and the assistance from him, to devote myself absolutely and entirely to the important work of teaching the deaf and dumb. He was there ten years in the institution. He completed his work there by bringing it to a condition of remarkable excellence, especially in a sanitary point of view. We had no sickness and no death for years there, and every one connected with the institution learned to feel a true respect and regard for him. He was a Christian, a gentleman in every sense of the term, and when he finally retired from the institution to take a tour in Europe, instead of regaining the health which had begun to be feeble, he lost it, and he died at his home in New York State, mourned by all who knew him.

The following obituary notices were then read: Richard S. Storrs, William B. Swett, William D. Cooke, G. E. Gibson, A. B. Lister, Dr. Thomas MacIntire, and R. H. Keeney.

RICHARD SALTER STORRS was born at Amherst, Massachusetts, September 29, 1830, and died at Longmeadow, Massachusetts, August 31, 1884. Mr. Storrs was graduated at Amherst College in 1852. Descended from a long line of ministers, with a rich inheritance of mental and moral qualities, the aim of his life had been to prepare himself for the Gospel ministry. The condition of his health turning him from that calling, he was providentially led, through his sister's infirmity, to enter the profession of deaf-mute instruction. He became a teacher in the American Asylum, at Hartford, in 1853. In 1864 he accepted a professorship in the National Deaf-Mute College at Washington, and for two years rendered most efficient aid to its young President in putting the college on a solid basis. In 1866 he returned to Hartford, where, with the exception of the two years above mentioned, his whole professional life was spent. As a teacher, Mr. Storrs had no superior and few equals. He loved his work, and threw his whole soul into it. He went down to his pupils, took them by the hand, and gently led them over the rough places to a higher plane. Quick to apprehend their difficulties, his fertility in expedients and readiness of invention enabled him to show them how to overcome them. Systematic in everything, he always knew just what he had taught. His pupils were led step by step from the easy to the difficult, and all the while they trod upon solid ground. They did not see the paving of the way, but it had been done for them all the same, and they walked securely. He inspired in them love, confidence, admiration, and they followed him without reserve. Full of wit and humor, Mr. Storrs gave full play to those qualities in the class-room, yet such was his dignity that no pupil dared to overstep the bounds of propriety. Vigorous and clear in thought himself, he cultivated and demanded the same qualities in his pupils. Lazy or slovenly work he would not brook. Above all, he strove to cultivate Christian manliness and womanliness in his pupils. Mr. Storrs possessed a mind of rare analytical power, which worked with surprising rapidity and grasped as by intuition every salient point of a question. It seized upon the broad, general principle which lay at the foundation of any subject, and viewed it from that standpoint. Conclusions reached, his rare gift of language enabled him to state with remarkable clearness and force.

In the death of Mr. Storrs, the profession lost one of its most suc-

cessful teachers, one of its most broad and vigorous thinkers, one of its most brilliant lights.

REV. THOMAS MACINTIRE, PH.D.—On the twenty-fifth of September, 1885, terminated the life of Rev. Thomas MacIntire, a man well known and highly honored in the profession. His whole life was devoted to the cause of deaf-mute instruction. Soon after the completion of his collegiate course, he became a teacher in the Ohio institution.

While teaching there he pursued a course of theological reading under the direction of Rev. Dr. Hoge, with a view to the ministry, which course he completed at Princeton Seminary. After an absence of one year, Mr. MacIntire returned to the Ohio institution, and resumed his position as teacher, which position he occupied till he was, in 1845, appointed Principal of the Tennessee institution, then in its formative stage. After five years of arduous labor, "amid hardships, trials, and discouragement," he resigned his position and returned to Ohio.

In 1852, Mr. MacIntire went to the Indiana institution as teacher, and very soon after became its Superintendent, upon the retirement of Mr. James S. Brown. This position he filled most honorably and acceptably until 1879, when he was displaced through political influences.

He was immediately afterward appointed Principal of the Michigan institution, which place he held for three years, resigning in the year 1882.

In 1883, upon the retirement of John A. McWhorter from the Western Pennsylvania school, Mr. MacIntire was appointed his successor, and continued in charge till compelled to retire, from ill health.

His death, which occurred soon after, was the result of physical and nervous prostration, following the arduous duties devolving upon him in the removal and reestablishment of a new school, where he was required to perform duties and assume responsibilities sufficient to impair the energies of a much younger man.

It was the good fortune of the writer to be the life-long friend of Mr. MacIntire, and, for many years, his collaborer in the Indiana institution, and he can most abundantly testify as to the sterling qualities of the deceased, as Superintendent, and to his character as an honorable and Christian man.

WILLIAM B. SWETT, the founder and Superintendent of the New England Industrial School for Deaf-Mutes, located at Beverly, Massachusetts, was a native of New Hampshire, having been born in the town of Henniker, of that State. After completing a course in the Hartford, Connecticut, institution, he learned nearly all sorts of trades, which proved of great service to him in his future life-work. Once he published an interesting book, called "The Adventures of a Deaf Mute in the White Mountains," which passed through several editions. In 1879 he established the school above mentioned, from a desire to establish a system which should not only educate the mind, but also train the hand. His labors were, however, not completed at the time of his death, March 25, 1884. Struck down with paralysis in the midst of his usefulness, his death was a severe blow to the infant school. The Trustees took hold of the management with a determination to follow his plans. At present it bids fair to become a credit to its founder. After six years of patient waiting, the noble work of this deaf-mute Superintendent has been recently recognized by the Com-

monwealth of Massachusetts, and receives an appropriation of two thousand dollars. It has made a beginning, and will, under a smiling Providence, grow to be a lasting monument of the genius and indefatigable patience of William B. Swett.

WILLIAM DEWEY COOKE was born May 27, 1811, in Vermont, and educated at Middlebury College. After graduating he obtained a position as teacher in the valley of Virginia. He was married in Staunton, October 2, 1834, and died there May 20, 1885.

During his residence in Staunton an institution for deaf-mutes and the blind was there established. The many accomplishments of Mr. Cooke rendered it easy for him to secure a position in the institution. He became an expert in the use of the sign language, and perhaps had no superior among the speaking teachers of the United States. Once in possession of this accomplishment, the field was open to him for the employment of his literary, scientific, and mechanical knowledge (in all of which he was well versed), for the benefit of the deaf and the blind.

There was no institution at that time in Raleigh, North Carolina. After much deliberation Mr. Cooke determined to visit the State and examine the field for himself. He soon won his way to the hearts of many influential citizens, and by them he was encouraged to make a tour of the State to plead the cause of the deaf and the blind. His expedition was attended with brilliant success, and such men as Governors Morehead, Swain, Graham, Manly, Reid, and Bragg were cordially committed to the new and benevolent undertaking. A State institution for the deaf and dumb and blind was in due time established at Raleigh, and Mr. Cooke was appointed Principal.

Mr. Cooke continued to occupy this important post until 1860, when he resigned to accept a similar position in the deaf and dumb institution at Cave Springs, Georgia. During the war he resided for some time in Richmond, and acted as publishing agent of the South Presbyterian Church. He was afterwards Principal of the Maryland Deaf-Mute Institute, but retired in 1870, and returned to Staunton, where he again took up the work of teaching the deaf and dumb, until an affection of the lungs led to a cessation of his professional work. True to his principles, even in retirement, he continued his productive industry, until death itself caused the implements to drop from his hands.

Thus passed away a life of wonderful energy and devotion to the great ends of Christian charity. Few, even of those gifted pioneers in the education of the deaf, have established a higher claim to distinction as promoters to the cause of special instruction. His brethren in the same field will doubtless cherish his memory, emulate his zeal and skill, and perpetuate the influence of his example.

ALBERT E. LISTER died at his father's residence in Panola County, Texas, July 3, 1885, aged thirty-two years. He entered as a pupil the Texas Deaf and Dumb Institute about the year 1869. Because of his reliability and good influence over the boys he was early appointed supervisor, which office he filled most acceptably. Owing to necessity arising in the school, and before he had completed the curriculum, he was called to the office of teacher, which office he filled from the year 1879 to the date of his death. Though of limited scholastic training, he proved to be a successful teacher in the primary department of the school.

Mr. Lister had all the elements of a real manhood; he was true,

just, generous, positive in his opinions, and conscientious in rendering to all that earnest service which his relations demanded. The institution in all its parts felt the happy influence of his connection. The officers in charge felt that in him they had a helper in promoting and maintaining the moral healthfulness of the institution; the teachers were assured that in him they had a fellow laborer without guile; the pupils recognized him as a true friend, ready to bear their burdens and help them in mental conquests. All officers, teachers, pupils, and employes loved him, and now mourn him as dead. Such a character commands respect and love. In the death of such a man the world loses that which is above price.

GIDEON E. GIBSON was born in Iredell County, North Carolina, on the thirtieth day of October, 1860, and at the age of about ten years was admitted into the North Carolina Institute for the Deaf and Dumb and the Blind. Possessed of qualities usually found in good and bright scholars, he made very creditable progress in his studies, and promised to be one of the brightest ornaments of the deaf community. Good natured, generally humorous, and fond of fun, he endeared himself to many, and was popular wherever he went. He was, as his father called him, "the idol of his home folks." Upon the completion of his eight years' course of study he was appointed supervisor. His amiable disposition and good sense made the performance of his duties in that capacity easy and successful. He also assisted in the instruction of a class of beginners. The next term he was promoted to the position of teacher of a primary class. His success in this new field of labor was such as soon won him the praise of many and gave an earnest of great usefulness. But his career was indeed a short one. When he left the institute in 1881 for his home, the conviction forced itself upon every one that we should never grasp his hand again on earth. He had been suffering from repeated hemorrhages from the lungs. His struggle to free himself from the clutches of that terrible disease, consumption, and at the same time to perform his duties as teacher, had excited the deep sympathy of his many friends. While at home, during the vacation of '81, he gradually grew weaker, and was compelled to resign his position as teacher in the institution. As the winter months approached it was evident to all that he was rapidly passing away. He was perfectly resigned to his Master's will, and longed to depart and be with Jesus whom he had tried to serve faithfully. February 21, 1882, was a very bright morning, but he watched the clock and told his friends who stood around him, that he would expire before ten o'clock p. m. He talked much—had a glimpse of heaven—was perfectly conscious all the time. True to his words he drew his last breath just before ten o'clock. Such was the close of a young life, rich in promise of increasing usefulness and success in teaching the deaf.

DR. THOMAS GALLAUDET: I can only recall the memory of one of the most painstaking, upright men I have ever met with. Dr. Peet could give more details of his early life, but I remember him as a pupil of the New York institution in 1845. He was noticed at that time as being remarkable for his compositions in the school-room, on occasions of public exhibition, etc. His productions were all looked for with interest. In due time he was chosen a teacher in the Deleavan institution, and remained there for a number of years. He married one of our deaf-mute ladies in New York, Eleanor Langlois, and both of them being of a frugal and economical turn, they both taught in

the institution, and from their earnings they had a very comfortable home. I remember visiting them and seeing them with their two sons growing up, and living in a most enjoyable way.

I believe that Mr. McCoy was always very highly esteemed in the Wisconsin institution, and there developed a Christian character which was looked upon as an example by all who knew him. I have heard of him in various ways in life's journey, as being one of those who had devoted himself conscientiously to the duties of that state of life into which it pleased God to call him. He was a deaf-mute himself, a graduate of the New York institution.

The following obituary notices were then read: Miss Etta P. McWhorter, P. W. Downing, and Miss S. I. Cuddy.

MISS ETTA P. MCWHORTER died at her mother's home in Albert Lea, Minnesota, in February, 1886. She was the daughter of J. A. McWhorter, who was, for many years, well known and esteemed by the profession as a teacher and Superintendent. After her father's death she accepted a position as teacher of articulation in the Minnesota school, where she labored faithfully and efficiently for two years. Ill health compelled her to resign in 1885. After a season of rest and recuperation, she went to Washington Territory, and was associated with Mr. McFarland in the beginning of a school there. But her health again broke down and she returned to her mother's home, where, tended by loving hands, she awaited with patience and Christian resignation the coming of the final summons.

P. W. DOWNING.—While the Committee on Necrology at the Eleventh Convention of American Instructors of the Deaf was preparing its report, one more name was added to the already alarming list, that of Pindar W. Downing, who died in Chicago, Illinois, during the session of the convention. Mr. Downing had spent all his life among the deaf, having been brought up in one of the Great Britain schools, and having taken up the work of a teacher at the early age of eighteen. As a matter of course he was familiar with the peculiar processes of the minds of the deaf, as well as perfectly at home in the sign language, and able to make clear to his pupils whatever called for explanation in less time than those whose advantages in this line had not equaled his own. By nature he was kind-hearted and generous; too free-handed, if anything, for his own good; always willing to discommode himself to oblige a friend. Having weak lungs, and seeking change of climate, he was connected at various times with the Nova Scotia, New York, Minnesota, Colorado, Iowa, and Texas schools. It cannot be denied that a proper attention to his physical condition, in the way of checking a tendency to irregular habits, might have gone far to counteract his natural weakness; but, like many others of the same class, this attention was not given in due season by himself, nor could he be induced, for any considerable length of time, to second by his own efforts the endeavors in this line of those who had his truest welfare at heart. His friends—and they could be found wherever he had lived—though unwilling blindly to follow the old motto, "*nil mort. nis. bon.*," will all join in the other, "*Requiescat in pace.*"

The death of Miss S. I. CUDDY, of the Nebraska Institute for the Deaf and Dumb, on the seventeenth of May last, was the first breach in our corps of teachers since the institute was founded. Miss Sadie I. Cuddy was born in Cumberland County, Pennsylvania, in the year 1853, and died at Omaha, Nebraska, May 17, 1886. She was engaged

in the work of deaf-mute education seven years. She served six years in the Western Pennsylvania institution, the latter part of the time under the lamented Thomas MacIntire, whom she counted among her warm personal friends. The last year of her life was spent in the Nebraska institute. As a teacher she was able, kind, and conscientious. She was pleasing in her manners, social and mild in disposition, in character Christian. She was a member of the Presbyterian Church and died in the hope of Him who doeth all things well.

PRESIDENT GILLET: This certainly is a most formidable array of our friends, brethren, and sisters who have passed on before us within the last four years, to prepare, or assist our Lord in preparing, the mansions which He has gone to prepare for us. He tells us that we shall be like Him. If we are to be like Him, we shall do as He does. Those friends, certainly, are doing as He does; and we have the delightful consolation, in the midst of this melancholy service, of knowing that they are engaged with Him in making preparations for us when our time shall come to pass on. My heart has been filled with unspeakable emotions this afternoon, as I have run back over the last thirty-three years, since the time I sat first in the convention with some of those who have been mentioned here to-day. I knew most all of them; all of them were my friends, and one of them was my preceptor; and another was to me a sister, and another was as a child. I shall never forget the scene when Miss Cuddy called me to her bedside and said, "I am not afraid to go, and I want you to be careful for nothing; but with prayer and thanksgiving, make your requests known unto God; and the peace of God, which passeth all understanding, shall keep your heart and mine through Christ Jesus," and soon passed away.

I must not indulge this afternoon in the remarks that would come flowing from a sad and full heart. It was moved that we defer discussion until after these notices had been read. I think, certainly, our feeling is rather not to engage in discussion any further this afternoon; but as soon as we may, out of respect to the memory of these departed ones, adjourn. We, however, see hanging upon the wall here the portrait of him who introduced this work into our country. We are all aware that a movement is now being made to erect a suitable monument to his memory. I think it would be very fitting and proper that we take some recognition of the fact at this particular time. And I understand that some resolutions have been prepared looking to that end, and that they are in the hands of Mr. Crouter, and with your consent I will ask him to read them.

MR. WILKINSON: It is my sad duty to add another name to this long list that has been read this afternoon. George A. Shoaf died this morning at six o'clock. He occupied an humble position in this institution—that of supervisor. But from the papers read this morning, and from experience of our Superintendents, we all know how important that office is. I shall not take up time giving any biographical sketch, or speak now of the virtues of the young man who has so suddenly passed away. But I would offer a resolution that his associates and deaf friends, Mr. D'Estrella, Mr. Tilden, and Mr. Grady, be appointed a committee to prepare a biographical sketch or notice of Mr. Shoaf, and, if not completed before the close of this convention, that it be incorporated in the proceedings of the convention.

This motion was seconded and carried.

MR. CROUTER then read the following resolution:

MR. PRESIDENT: I desire to call the attention of the members of the convention for a short time to a subject that has attracted much notice and interest, especially among the deaf, during the past year. I feel that this convention will not have fulfilled its whole duty, or completed its labors here, if it adjourn without taking some action upon the subject. I refer, Mr. President, to the contemplated monument to be erected to the memory of the elder Gallaudet, in Washington, for the prosecution of which work funds are now being collected in many parts of the country. It is a worthy project—one that ought to be dear to every friend of good and philanthropic effort. Thus far the labor of collecting funds has been carried on, mostly by the deaf, with encouraging results, some \$4,000 having been raised, but I feel that the time has come when we, as officers and instructors, should give some united aid and encouragement toward the successful prosecution of the work. I would, therefore, Mr. President, offer, with reference to this matter, the following resolutions, which I feel assured will be approved by the members of this convention without a single dissenting voice, that:

WHEREAS, The Rev. Thomas H. Gallaudet, in founding the American Asylum at Hartford, Connecticut, began a work that has revolutionized the condition of the deaf in America, that has elevated them as a class, and brought them from a condition of darkness to that of enlightened manhood; and whereas, his work and worth commend him, not only to every deaf-mute in the land, and to all engaged in their elevation, but to all mankind as well; therefore, be it

Resolved, That in no way can we testify to our reverence for the memory of Thomas H. Gallaudet, and to our appreciation of his labors, than by a hearty, generous coöperation in the efforts now being made to collect funds for the erection of a fitting memorial to his life and work; be it

Resolved, That it is the sense of this convention as a whole, and of its members as individuals, that every effort should be made to increase this fund and make it one commensurate with the object in view; be it

Resolved, That the Principals and Superintendents of institutions here assembled be earnestly enjoined to influence, in so far as they can, their respective Boards of Directors and Trustees, and the officers, teachers, and pupils of their schools, to contribute liberally, and in a manner becoming the importance of the object in view, to the Gallaudet memorial fund; be it

Resolved, That a copy of these resolutions be sent to every institution and school for the deaf in the United States and Canada.

This resolution was unanimously adopted.

MR. NOYES: I presume nearly all of the members, if not all, are aware of the fact that there is a special effort about to be made in England with reference to the unfortunate or dependent classes. That commission has been appointed to inquire into the condition of these classes, both in their own country, and also as to what is being done in the United States. I believe the President of the college at Washington has been invited to meet with that commission to give them information concerning the work in this country. And it appears to me that it is proper for this body to give our word of encouragement and sympathy, and to commend to that body so honorable a gentleman as the President of the college at Washington. And in consideration of that, I submit the following for the consideration and approval of this convention:

The Convention of American Instructors of the Deaf, meeting in California July 15 to 21, 1886, sends cordial greeting to the Royal Commission to Inquire into the Education of the Blind and of the Deaf in Great Britain and Ireland, and begs leave to express the hope that the labors of the commission may result in great and lasting benefit to the cause of education for special classes in the British Empire.

The convention learns with pleasure that the Royal Commission has invited Dr. E. M. Gallaudet, President of the National Deaf Mute College, and Chairman of the Executive Committee of this convention, to give information concerning the education of the deaf in the United States; and the convention takes this occasion to commend President Gallaudet to the Royal Commission as one who possesses, in the highest degree, the respect, confidence, and esteem of all American instructors of the deaf.

This resolution, being seconded, was carried unanimously.

DR. PEET: Some resolution should be passed expressive of the general sentiments of this convention, and I suppose that among the

other information which Dr. Gallaudet will convey to the Royal Commission, will be these resolutions. I will offer the following resolution, which I think may be of benefit to others in the convention, of the sentiment of this convention:

Resolved, That in the opinion of this convention, instruction in art is of special importance in the instruction of the deaf, as without its guiding and developing influence the peculiar tendency of the deaf-mute's mind to think in pictures cannot be taken advantage of, to place him on that plane in life to which he is best adapted, nor can that superiority in handicraft of whatever kind which he is capable of attaining be placed within his grasp.

This resolution, being seconded, was unanimously adopted.

MR. CROUTER: The Executive Committee report that a recess be taken to-morrow morning and afternoon, and that a session be held to-morrow evening at half-past seven o'clock. At that time a lecture will be given before the convention by Theodore A. Lord, Esq., on the "Samoan Islands;" to be followed by closing exercises.

Here the convention adjourned until to-morrow (Wednesday) evening, at half-past seven o'clock.

WEDNESDAY EVENING, JULY 21, 1886.

Mr. Crouter in the chair.

THE CHAIRMAN: The next subject to be considered is "Aural Work," by Mr. Gillespie, of Nebraska.

MR. GILLESPIE: As we understand it, our object in meeting together, is to discuss the different methods and systems of teaching the deaf and dumb. The methods practiced in the sign schools, the methods practiced in the articulation schools, and in both schools, and in every conceivable form, have been discussed in this connection. Now the last feature seems to be one that takes in the cultivation of hearing as well as that of speech. In a paper presented by my friend from Pennsylvania, the deaf are classified into three divisions, or subclasses, and he teaches them in two divisions, as I understand it; the congenitally deaf in one division, and the semi-mute and the semi-deaf in another division. I agree with Mr. Crouter in that particular. We have practiced that method in our own school for the last two or three years of dividing the classes, and of teaching the semi-deaf with the semi-mute aurally.

Now, I will go one step further than Mr. Crouter does, and will divide that class, teaching them separately—the congenitally deaf, the semi-mute, and the semi-deaf, making in all three distinct divisions taught by three distinct methods! The methods which will apply to the semi-deaf will not apply to the semi-mute. In the semi-mute we have a boy or girl without hearing, and our object is to bring out and cultivate this dormant sense. I presented a paper at the last conference or articulation convention in New York, and very nearly the same paper was printed in the "Annals," and what I had to say I said at those times. On the present occasion I shall let others speak through me.

I prepared a list of questions and submitted them to the Superintendents of the institutions, and I have received replies from thirty-five of them. The inquiries had in view the number of semi-deaf in

the schools, the tests made during the last year, the number taught wholly aurally, and I will present a few of these statistics for your consideration.

The first question was, "Has there been a general test of the hearing made in your school?" Out of the thirty-five institutions heard from twenty-two answered in the affirmative.

The second question is, "How many have you found with sufficient hearing to distinguish vowel sounds?" The answer from those twenty-two institutions is eighty.

The next question is, "How many have been taught wholly aurally?" The answer to that is thirty-five. That includes our own institution.

The next question is, "How many are taught both aurally and orally?" By this question I meant to bring out how many were taught with a view to cultivating the hearing. Whether the Superintendents all answered it in that way I cannot say, but I think they did. The answer is three hundred and ninety-nine.

"How many were taught aurally previous to the year 1885?" The answer is fifty-three.

The question is, "What is aural teaching?" In a previous article I have put the figures at fifteen per cent of our children at school that have sufficient hearing, though dormant, to be developed. And of that number the majority, I claim, could be graduated as hard of hearing and speaking people, instead of deaf-mutes. And by neglecting this training they would be graduated as deaf-mutes. Our object is to bring them just as near to speaking people as it is possible to do. My experience has convinced me that fifteen per cent is not too low an estimate. What we have done in the last two years is just to carry on the work as represented before. Quite a number of the teachers here present will recollect the convention in New York, in which a full description was given, and I will not go into that now. In the first place, before I go further, I will say that we had prepared a number of object lessons, and our aural teacher, Miss Plum, was to be here, and started, but owing to sea-sickness on the desert she was obliged to stop at Colorado Springs, to my regret and inconvenience. She has prepared papers since we left Colorado Springs, and forwarded them to me, and some of them I will read.

I will first read Miss PLUM's paper, though I do not say that I shall absolutely indorse everything that she would say:

A YEAR'S WORK.

At the opening of this work it may be well to define what the aural method means to us. It is educating the brain to use the hearing so that speech may be gained. A speaking child enters school knowing words by sound and soul. He needs to be taught the sight of all ordinary ones and becomes possessed at once of the key that unlocks to him the temple of knowledge.

Our pupils come to us with nothing but powers waiting to be developed. It is the work of the aural teacher to cultivate these, which are, the hearing, the mind, and the voice. How we have done this, it is the object of this paper to show.

Trying to come as near nature as possible, we have used what may be called a "natural method." Taking a picture dictionary the child looked over it until a familiar object was found whose name was

easy to reach. This was pronounced in his ear "bee." His first effort at imitation resulted only in the enunciation of the vowel, but we were thankful that his hearing had so caught the word that he knew what was meant when it was again spoken.

Following this plan with a few nouns and the pronoun "I," the verb "see" was given and for "busy work" the class wrote:

I see a bee.

I see a door.

I see a boy.

I see a cat.

I see a pin.

As soon as the word was recognized by the ear and spoken, it was written for the class to copy. Work like the preceding occupied the first month of school and with the second month the word "have" was introduced.

One of the little girls had a breastpin, which was not the happy condition of the rest, and she was taught to say:

"I have a pin," while the others said, "I have no pin."

Pointing to my mouth I questioned them as to their possessions in that line—yes, they each had a mouth but did not know what to call it. Having heard its name they could triumphantly say, "I have mouth," which was changed to, "I have *one* mouth."

Now this word, as all others, was learned through the hearing, and when spoken in the trumpet every finger and voice gave indication that it was understood. There is some difficulty with words that are like. They look alike on the lips, but, in time, even the slightest shades of difference in *sound* are distinguished.

From the mouth, we proceeded to other parts of the body and there began our arithmetic. The little ones said:

I have one mouth.

I have one nose.

I have one neck.

I have one tongue.

I have one chin.

I have two ears.

I have two eyes.

I have two arms.

I have two hands.

I have two lips.

I have two cheeks.

I have two toes.

Frequently they had spelling exercises, and wrote and spoke the words given in their ears or through the trumpets.

Before leaving this point they were taught my name and the word "has." The verb came in by merely saying: "Miss — have one mouth." No; "Miss — *has* one mouth."

Now, the names of the class were learned and exercises with the verb in the third person were used, as—

John has two eyes.

Mamie has two ears.

With the pronoun "you" came several new words, as—

A dress.

A black dress.

Two shoes.

A white apron.

Here the verb "is" (which can only be taught by its use) was necessary. With this verb, the pronouns "my" and "your," and the possessive case of the nouns, we made—

My dress is black.

Mamie's dress is blue.

Ernest's hair is brown.

Your hair is black.

My eyes are blue.

Color lessons were given by matching different colors of paper with any articles in sight, as—

The paper is red.

Fannie's dress is red.

Your ribbon is red.

The book is red.

And so on, until they were familiar with the most pronounced colors.

At this time they began to write descriptions of one another. A note-book gives us this:

Mamie Hall is fat.

She has blue eyes.

She has yellow hair.

She has a red dress.

She has a white apron.

Her shoes are black.

She has a gold pin.

She is pretty.

For question work we gave sentences in this form:

John's eyes are —.

Eddie has — hair.

Nettie has a — dress.

— apron is white.

During this time there has been a daily exercise in action work. Performing the action I say, "I ran," then command, "John, run." The class say, "John ran," while he writes, "I ran." In easy actions we have used "ran," "walked," "hopped," "danced," "opened," "shut," "sat," "washed," "held," "folded," "laughed," "cried," etc., giving the command in the present tense and having it spoken in the past, when finished. I say, "Fold your arms;" obeying, the child says, "I folded my arms," or, all obeying, say, "We folded our arms," "You folded your arms."

Now they had some questions in a written form, as—

What did you fold?

Who marched?

Who held the coat?

Who opened her mouth?

Again were given object lessons. With the picture of a cow in view they tell me—

"The cow has feet;" but I write,

"The cow has hoofs," and they see the difference of the name. Now with the written form of "How many?" I ask—

How many hoofs has a cow?

How many horns has a cow?

How many eyes has a cow?

How many legs has a cow?

We have a set of Prang's Natural History Cards, and have used for this class the cow, horse, sheep, dog, deer, eagle, duck, all of which they learned to describe as stated.

Using Appleton's Reading Chart we have found ample scope for teaching names, prepositions, and action words. This has been quite written up in the "Auralist," but may bear repetition here. The picture used in our examination was a farmyard scene, and had been taught thus: The names of every object, then—

Where is the man?

What is he doing?

What is on the fence?

How many chickens do you see?

Where is the water?

Where is one little chicken?

Answered—

The man is near the fence.

He is walking.

A bird is on the fence.

I see eight chickens.

The water is in a pan.

One little chicken is in the water.

Thus we go on just as other teachers, except that we give words to the *hearing* as well as to the lips and mind. Our pupils do not learn more than do others—perhaps not much—but they *feel* they have a hold on the world that their less fortunate schoolmates have not. In one year we have used five hundred and ninety-two words, including those used for arithmetic, which were the numbers from 1 to 20, applied in all sorts of "examples."

Now, this is an outline of the year's work. The child sees an object, *hears* and speaks its name, and then learns its written form. Thus he gains what signs and articulation would teach him, but best of all has power to *hear* what he has learned.

Let us have more of it.

MR. GILLESPIE: Now I will read a paper from PROF. E. R. CURRIER.

A METHOD OF AURAL INSTRUCTION, SUGGESTED BY EXPERIMENTS FOR THE DEVELOPMENT OF HEARING, AT THE NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE DEAF AND DUMB.

"All method is a rational progress,
A progress toward an end."

The recognized systems of instruction, by means of which the deaf and dumb of the present time are brought out from the narrow confines of a solitary, soundless existence, in which their infirmity has placed them, are the results of unwearied labor and exhaustive experiment, for more than a century, on the part of their instructors, who, actuated by a single desire, that of placing this class of defectives upon the social plane occupied by their hearing brothers, have, by patient, philosophic, and prayerful persistence, so nearly obliterated the barriers which surround the unfortunate condition of living that deafness imposes.

A retrospective contemplation of these philanthropic endeavors reveals to us, that, although very much has been accomplished, since the educational necessities have been so thoroughly provided for that there can no longer be a reasonable doubt in regard to the surest methods by which the deaf shall be taught the existence of a Supreme Being and their relation to Him; the duties they owe to their country and to their fellow men; something more remains to be done before

we can assert that the goal has been attained. Our future investigation and endeavor must furnish a satisfactory solution of, at the lowest estimate, two important and pressing problems: How can we give to the deaf the ability to communicate with greater accuracy and to receive communication with greater ease from the world at large? And, how and to what proportion of this class can we, by aural development, give available hearing?

To the latter question, I shall ask attention, in the hope that an increased interest may be awakened, which shall be productive of benefit to at least a portion of the deaf now under instruction in the institutions of America, it having already been ascertained that there are in every school for this class a number, larger or smaller, who are enabled by the use of some form of instrument to perceive voice sounds; and also, because some study has been directed to the possibility of bringing those possessing a remnant of hearing, to such a condition that they can readily comprehend our language when addressed to the ear. Hearing may be defined as that perception of the mind by which, through the mechanism of the ear, a knowledge of the vibratory motions of bodies, which constitute sounds, is obtained. In its normal condition, the external ear collects the sound waves and reflects them upon the membrane of the tympanum; this membrane then facilitates their transmission to the chain of small bones in the tympanic cavity, or middle ear; to the walls of this cavity and to the air it contains; thence to the oval window, from which the vibrations are communicated to the fluid of the labyrinth, or inner ear, until finally they are received by the filaments of the auditory nerve, by which the sensation is imparted to the brain.

In using the phrase "aural development," we of the New York institution have in mind the systematic training of an ear in abnormal condition to perform, with the aid of mechanical contrivance, the operations just described. The defective ear, as found in the so called deaf and dumb child, either from pre- or post-natal changes, is incapacitated for the transmission of sounds *per se*, and the functional action intended by nature can only be secured, if at all, by the employment of artificial aids. Qualified by instrumental assistance to perceive sounds, the condition of the acoustic mechanism of this class of children for practical audition, then, is not widely different from that of the hearing child at the age when he begins to attach significance to sounds. It must, therefore, be susceptible to the same influences, because the existing abnormality has thus, in a great measure, been compensated for. It becomes evident, then, that the affording an opportunity for such ears to become acquainted with all classes of sounds will secure, not only a gradual realization and appreciation of their different values, but, at the same time, will tend to arouse to life and action the heretofore dormant vocal organs, owing to the fact that the comprehension of sounds addressed to the ear always stimulates as well as facilitates the inclination to imitate them. Endeavors in this direction on the part of the pupils under my instruction at the New York institution, prompted a series of experiments that resulted in the perfecting of a duplex ear-piece, by means of which two conversational tubes are united, making it practicable for the pupil to hear what is said to him, and also enabling him, in hearing the tones of his own voice, to compare his enunciation with that of his instructor, thereby securing the reproduction of vocal sounds with greater clearness and precision than had before

been possible. The weakness of utterance, however, in many of the cases, where a slight degree of hearing had been discovered, prevented the employment of the conversational tubes already known for voice culture, as their conductive power, when used by the pupil, was found to be insufficient to affect his auditory apparatus. To overcome this defect, I designed the conico-cylindrical tube, which is acknowledged to be the most powerful conductor of the human voice yet perfected. Uniting this tube and the American conical tube by means of the duplex ear-piece, a thoroughly useful and practical instrument has been secured, and the invaluable aid of the ear has thus been brought to assist in the development of the voice. The favorable results attending these efforts to secure an increase of the hearing faculty, so far as relates to the comprehension of spoken language, seem a sufficient warranty for a brief presentation to your consideration of my method of procedure.

Begin by accustoming the ear to interpret the sounds of the short vowels and their modifications combined with the consonants, for the reason that a very large proportion of the syllables in the English language have the short vowel sounds, and, also, because the first efforts required to master the pronunciation of our language are facilitated by a limited number of easy rules.

The class being furnished with the double instrument before described, write a sentence on the large slates, one in which short "a" only is required; for example: "That cat ran at that rat." Placing the ear tubes firmly in the external meatus, speak the sentence slowly, a word at a time, into the bells of the smaller tubes, gathered in a cluster and grasped by the hands of the teacher, while the bells of the larger ones are held by the pupils opposite their mouths, and require each pupil to repeat the words after you, as near as it may be possible for him. Next repeat the entire sentence, and urge the pupil to attempt it in the same way without assistance.

In this connection I would remark that the pupil should be allowed to observe the lips of his teacher, in order that he may the more readily imitate the required sounds. If, however, this watching proves insufficient, his attention should be directed to the proper placing of the vocal organs for the production of such sounds. Do not expect or demand perfection. Approximation is sufficient at first. You will dishearten, discourage, and depress if you criticise too closely. Bear in mind also that the child possessing normal hearing requires years of practice, and that under the most favorable circumstances, to secure correctness of enunciation. Recall the recitations of "Mother Goose" and kindred rhymes by your own little friends; recitations in which scarcely a word would be spoken with sufficient distinctness to be understood by yourself, but which the fond mother and proud father followed with ease and interpreted for your benefit. Should our hearing pupils be treated with less consideration?

Take up, seriatim, the sounds composing the words in the sentence: "Th-a-t (that) k-a-t (cat) r-a-n (ran) a-t (at) th-a-t (that) r-a-t (rat)," combining the aid of both eye and ear. In this way you will do better than "kill two birds with one stone;" you will kill three—lip reading, hearing, and articulation.

As soon as short "a" is mastered, take short "e," as in "pen;" short "i," as in "pin;" short "o," as in "not;" short "u," as in "nut;" and develop them in the same way.

Whenever it happens that the pupils are acquainted with the sounds

of all the letters in any sentence presented to them, they should be required to read that sentence without making the analysis. Such practice will, provided they are conversant with the meaning of what has been written, cause them to make sound and satisfactory progress.

Take up the long vowels in the same manner, and, when you have completed them, you will not only have laid a good foundation, on which can be placed the superstructure without uncertainty as to results, but you will have also increased and quickened the ability to perceive and comprehend sound.

The marked unwillingness of deaf persons to use, outside the classroom or home circle, any instrument that attracts the attention of strangers will, in my opinion, prove the greatest obstacle in the way of securing that culmination which would otherwise be assured by any thorough and systematic course of aural instruction.

MR. GILLESPIE: I have a letter from PROFESSOR DOBYNS, of the Mississippi institution, which I will read:

OFFICE OF THE SUPERINTENDENT OF THE INSTITUTION FOR THE DEAF AND DUMB, }
JACKSON, MISSISSIPPI, July 6, 1886. }

MR. J. A. GILLESPIE, *California Institution*:

MY DEAR SIR: I am sorry not to be able to attend the convention, for several reasons, and one is that I might bear a personal testimony to the "aural" work done in our institution during the last few years. I am satisfied that this branch of our work is growing in efficiency as the members of our profession become interested and appreciate it.

During the past year we have given an hour's instruction daily to a class of ten. Five of this number could not, at first, distinguish vowel sounds, but by long and patient practice can readily do so now, and also words and sentences. One pupil, who has been under instruction for ten years, can understand what is said at a distance of two feet without the aid of an ear tube. We find the degree of proficiency of their hearing varies, one day being more acute than another. We attribute this to the state of their health, or, possibly, atmospheric influences.

We have a class of four who are taught altogether *without* signs, and I find the hearing of the four has been much improved during the past year. Those who can hear, or distinguish any sound with the ear trumpet, I intend to practice constantly and, if possible, develop their hearing so they can take their places in the regular "aural class."

Miss McGann, our efficient and successful teacher of articulation, says: "I have taken great interest in the aural class, and am positive it will repay a teacher to undertake this lately discovered but valuable branch of education."

I want to assure you that I regard the aural work of much importance, and I am satisfied that every institution has a sufficient number whose hearing (or ability to distinguish sounds) could be sufficiently improved to make an interesting class.

Hoping you may continue to arouse interest and enthusiasm in this good work, I am,
Yours truly,

J. R. DOBYNS, Superintendent.

MR. GILLESPIE: Prof. Weston Jenkins, of New Jersey, will read a paper by PROFESSOR GORDON, of Washington:

THE COLUMBIA INSTITUTION FOR THE DEAF AND DUMB, }
KENDALL GREEN, NEAR WASHINGTON, D. C., July 6, 1886. }

My Dear Professor GILLESPIE:

In this institution a record was made of ninety-six cases tested with the audiometer used by Professor Clark in New York. The full record includes age, cause of deafness, color of eyes, hair, complexion, and audiometer reading for each ear. The following is the summary for the "best" ear:

Doubtful.....	7	Between 25 and 30.....	15
Below 5.....	5	Between 30 and 35.....	11
Between 5 and 10.....	4	Between 35 and 50.....	10
Between 10 and 15.....	25	Between 50 and 55.....	14
Between 15 and 20.....	16	At 55.....	11
Between 20 and 25.....	15		

* Half of this group of sixteen might be rejected safely at once; the other half would require a long course of systematic exercises to determine the possibilities in each case.

† Certainly possess an utilisable degree of hearing.

As I understand Mr. Denison, the Principal of the Kendall School, has furnished you detailed information concerning the aural work here, it is only necessary for me to reaffirm my conviction as to the inestimable value of this branch of our work to a considerable number of our wards.

A young man leaving college this year is perhaps deserving of mention, as a peculiar case. He became deaf at the age of two and one half years, and was educated in the Illinois institution and the college. By the audiometer the register of the right ear was naught, the left ear seventeen. He could whistle certain tunes with approximate correctness, and imitate whistled sounds; he could also play tunes upon a jewsharp. Experiment indicated that he could often recognize the *repetition* of the same words, and in some cases, elements; but he had no mental perception of speech, through the sensation of hearing. Now, the audiometer record of this young man does not fall far below the "worst" ear of a very deaf gentleman who is a recognized authority upon the sounds of the English language. This gentleman's record is twenty for the right ear and seventeen and one half for the left.

Yours, truly,

J. C. GORDON.

A MEMBER: What is normal hearing.

PROF. F. D. CLARK: There is no such thing as normal hearing. You can draw a complete gradation from the most acute hearing to absolute deafness, and can put your finger at any place in the line, and say this is normal hearing.

A MEMBER: What would your hearing be?

MR. CLARK: Sixty-seven in one year, and seventy-three in another; on that scale. That is a little below the normal hearing, I think.

A MEMBER: I would ask Professor Clark to explain the use of the audiometer.

MR. F. D. CLARK: I am one of the coinventors of the audiometer. The audiometer, as we use it here, is a modification of Hughes' sonometer, or sound measure. We wished to make a perfectly accurate instrument to measure hearing. There has never been such a one made, and this is the nearest approach to it. At the first meeting of the committee appointed by the articulation convention two years ago, my friend Noyes put me on without my consent or knowledge, and I joined it with the express intention in my mind of sitting on my friend from Nebraska, and crushing him out of existence. That was the question that came up; how shall we measure hearing, so that when we talk about it we can say a person hears so much, and know what we are saying. Mr. Bell and I were present at that meeting, but Professor Gordon, the other member of the committee, was not there. And we spent some two or three hours in talking the matter over, and the audiometer was the result. It consists, first of an ordinary Symondy's electro-magnetic machine; the armature so arranged that in each revolution it makes, it breaks the electrical current a great many times. You are aware that every time the electrical current is broken which passes through a telephone, the Bell receiver of the telephone, it produces a tick in that telephone, and that when the breaks are very rapid they coalesce into a sound. There is also another law of electricity that when two coils of wire are near each other, and the current is made in one, it produces a current in the opposite direction, in the other. There is another law, that, as those coils are separated that the produced or induced current becomes weaker and weaker until you reach a distance at which it is practically nothing.

We worked upon those facts, and have the instrument. It is a long box in which there are two coils, one fastened at one end of the box, and the other moves along a scale. When these coils are placed together and a person speaks into the box, the noise is so intense that I can hardly hold it close to my ear without its deafening me. As we

move it away the sound becomes less and less until, as I stated a little while ago, at sixty-seven and one half I lost it one ear, and was able to hear it at seventy-two in the other, in a silent room. I would lose it much before that in a room where there was some noise. Professor Melville Bell, the old gentleman, is able, not only to hear at eighty-seven but says he can hear it much further, which, perhaps, will account for the wonderful way in which he has been able to analyze sound. At ten is about the point where I can bear to hold the telephone closely against my ear, and catch all of the sound. Some fail there, and so on down. Many persons can go about fifty-five. This table here is Dr. Gordon's test at Kendall Green. In New York it was about the same way. I have made fourteen hundred tests in the last year; that is, tests with fourteen hundred different people. That includes the tests made last year in the New York institution, also in New Jersey, and Illinois, and all of the deaf-mutes that I could get in and around New York, and those that I had in Arkansas.

MR. GILLESPIE: Will you give us your opinion of this matter before you made your tests?

MR. CLARK: I was absent when the committee was appointed. When Professor Noyes suggested my name I think I told him that I did not want to serve. But he told me that I had to, and I thought I would. I went in there as a skeptic. I do not think you can find in the whole profession to-day a more thorough and ardent believer in aural teaching than I am. [Applause.] I was perfectly astonished. I became so interested in it that night after night I went to the New York institution after dark, waiting until the boys and girls had got through their studies; got those boys into the class or study-room, and tested their hearing with two or three different sets of tests. Mr. Currier assisted me very greatly in that work. I am also indebted to him for many very valuable hints, especially for what I consider one of the most valuable, and that is this method of gathering all of the tubes of the class into one or two hands, putting the tube that leads to the deafest ear in the best position, in front of the mouth, and grouping those that can hear better around it, and talking right into the whole thing, and letting them all hear at one time. That is his idea. He gave me that suggestion, and I have used it since, and it is a very valuable one. Perhaps some other teachers may have discovered it independently, but Mr. Currier taught me.

I did not do any aural teaching, except in my own class, during articulation hour in New York. Mr. Currier had the pick of the institution in his aural training. But in one class in New York, a class that, as far as I can remember, certainly were not picked out for their hearing, a regular class of girls in the institution, it seemed to me as though they all could hear. The first five or six girls we picked out one after another, seemed to hear right through the tube, and to hear to a great extent. We would say "oh," and they would say "oh;" we would say "ah," and they would say "ah." Then we would try them on sentences. I would say, "Are you a bad girl?" They would not get that, but they would give me a sound of voice that showed they certainly heard it. Any one that did not believe that some of those girls heard would not believe that any one heard. We had nearly four hundred cases in the New York institution, and Professor Gordon had less than one hundred. The percentage at the Illinois institution was larger than this. The percentage at the New Jersey

institution was a trifle smaller than this. In Arkansas, which is also a part of the total, the average is larger; but it is small here, so that you may take that as a fair average. I have not yet worked up a complete percentage of all the tests that I have made, as I have been very busy during the last year. We have been building and reorganizing our school, and I have been ashamed of myself for the way in which I have treated this aural training. I have not done what I hope I will be able to do next year, by a great deal. But we have had some most wonderful results in Arkansas. I had a boy come into my office one day and come up to me, and said "my fa," and then he would go on again in that way. I listened just as intently as I could, but could not make out a word he said. He had been in school the year before, and had been taught by signs for the whole year; and the result was that he knew his letters, up to "f," but was not very sure about "f." That is all that he knew. His father wrote to me that he could hear some, but that it did not seem to do him any good. He said that they could holloa at him, and that he thought he knew his own name, and they thought he could pick that out from other signs, but that the only words he knew so as to be understood were "pa," "ma," "my," "brother," and "pony." I tried him upon "pony," and he said "po." We took that boy, and the first trouble we had with him was when we said anything to him through the trumpet, to keep him from starting in and uttering these words for five or ten minutes. We had hard work to teach him that he had to hold up; that we did not want him to say any more than we said to him. He would jabber right along. We worked with that boy all this time, and just before I left Arkansas, we had a cook in our kitchen who had just come there, and knew no signs at all, and his assistant was taken suddenly sick Saturday morning, and I called to this boy and said to him, "Albert, don't you want to make fifty cents to-day?" He always wanted to make fifty cents. I said, "Go into the kitchen and help the cook, and I will pay you fifty cents to-night." I did not say anything to the cook about it, except that I told him he would have to speak loud to the boy. At night I went there and said, "Well, does the boy understand you? how did you get along with him?" "Well," he said, "some things I would say to him he would seem to understand just as good as anybody. Some things he would repeat after me—he did not seem to understand." You all know what that was; the cook had gone outside of the boy's vocabulary. And while he could imitate the sounds, he had no idea of what was being said to him. That is one case. That boy is on the records of the institution as congenitally partially deaf.

We have another case that is put on the records of the institution as "totally deaf," but he has a good deal of hearing. He has been taught through the tubes, and has acquired considerable development. He is a semi-mute; lost his hearing at four years old from cerebro-spinal meningitis. My Board of Directors come up there and go into the shoe shop, and they ask that boy questions and talk with him just as you would talk to Professor Porter, and with the same ease. He knows almost all of the words, and we have no trouble in extending his vocabulary. I never knew him to fail to get a word, and he really seems to me to be only hard of hearing. He does not speak as plainly as I would like to have him.

Those two boys are friends, and are together all of the time, going around and talking to each other through their tubes. They do not

make signs to each other. When they meet other boys they make signs. The younger one does not know signs very well. I can go into the shop and say to either one of them, "Where is the last pair of shoes you made?" He would bring them to me just as quickly as any speaking boy. I can tell him, "Go down and open the gate and let this gentleman go out, and close it after him," and he will do it. I talk with them in the ordinary tone of voice, six or eight feet off. Six feet away I can talk to them in a common, ordinary tone of voice, and he will understand everything I say.

I would say about these audiometer tests, that I do not think they are at all essential. You can do the same thing in your own institution with a speaking tube. If you have an audiometer, you can make the test a little quicker, and get an idea of the extent of deafness a little sooner. In making audiometer tests we should always keep a record of them. We should keep a record of tests made in both ways. A piece of stiff cardboard is just as good as any audiphone that you pay ten dollars for, as long as it lasts; and a piece of hard millboard will last about as long, and be good until it is used up.

Now, about the audiphone. I have found, although I was an unbeliever in it, that about one in a hundred of the deaf-mutes who do not hear with a trumpet, and who are very deaf to the audiometer, will hear with an audiphone in a degree that will perfectly astonish you. But there is no more than that. It seems to me that it either helps them a great deal, or it is of no use.

We have a record of the name and age of each of the pupils upon whom these tests were made; of record, also, as to the color of their eyes, color of their hair, etc. About one in a hundred we find that the audiphone does help.

MR. HAMMOND: What particular bearing have the color of the eyes and hair here?

MR. CLARK: That was noted at Professor Bell's request. He desired to see if we could find any law in it. I was working in a committee with him, and that was done at his request. As to the aids to hearing that we use, my private opinion is that "The American Conico-cylindrical" tube is the instrument that we must work with in a very large majority of cases. This is a tube made by every instrument maker, as it has been for the last twenty-five years, a tube which tapers down towards the point, and is not the same size all the way. I have tried some very large tubes. I do not state this as my conviction, but as my very strong opinion, that if you get a tube that is larger than ordinary, as soon as you begin to increase the size, what you gain in loudness, you lose in distinctness. You may make your pupils hear with it, but you will never be able to teach them to distinguish what they hear. They simply hear a confusion of noises. The size commonly in use seems to be the nearest perfect.

I must say that I look upon the double tube as simply a nuisance. It is not as powerful as the single tube.

Dr. Sexton, of New York, a man of national reputation, has a tube that is double at both ends, having two mouth-pieces, and two ear-pieces, one for each ear. The ear-pieces stay there by themselves, by pressure which you can regulate. But I cannot say, conscientiously, that I ever saw any particular benefit from it. If there is any, I do not think it is enough to pay for the added machinery and cost. I can buy a double tube for ten dollars, furnished at twenty-five per cent discount to institutions, and I can buy two tubes with a separate

ear-piece for the same price, and I much prefer them. If gentlemen wish to experiment, they are welcome to spend ten dollars. But I have got through experimenting with double tubes. I only spend my money for single tubes hereafter.

MR. HAMMOND: I supposed that the advantage of the double tubes was that the scholar could hear his own voice.

MR. CLARK: The children will leave it in the school-room every time. Some teachers may differ with me about their relative value and usefulness, but I simply give you the result of my experience.

I have used a little different method from that explained by Mr. Currier in his letter. I have found in my experience that the long vowel, or those vowels which can be prolonged, as "oo," "aa," "ee," seem to be recognized by the deaf when the short vowels are not. So I teach those first, though there is no objection, that I know of, to teaching the others first.

I agree with Mr. Currier exactly in the usefulness of the drill of allowing the pupils to look at the lips and hear through the tube at the same time when you are speaking to them. In fact, in teaching the deaf I have always made it a rule, if I can teach a boy anything in one way easily, and it is hard to teach him in another way, I take the easier way every time, if it teaches him as well.

If I can take a boy who is hard of hearing, but who reads the lips well and accurately, and teach him to recognize the sound of a trumpet easier than by taking a new start, I like to do it. However, there are some cases where they read the lips with so much ease, that it is necessary to conceal the lips from the pupil. And I want to say to all teachers, that when they conceal the lips they must also conceal the whole face, for deaf-mutes sometimes read wonderfully well when the lips are covered up. I sometimes stand behind the pupil, so that he cannot see me. I sometimes put the tube under my arm and turn my head completely away from him. The teaching of our aural class has been done entirely by Miss Kirkham, my articulation teacher; and I have had but very little to do with her, beyond giving her my advice. We have two boys whom we teach through the ear entirely. I have frequently asked them to spell a word for me, and they spell it, naming the letters in the old-fashioned way. They never have had any elementary drill in articulation. They have been taught articulation, but not by elements. And I do not think that I am doing them any harm, as I intend to teach them from this time until they or I leave that institution in the way in which they are taught now. There are several others there whom I have no doubt at the end of next year will be as proficient as these two were at the end of this year.

There is no doubt in my mind that as a result of this training the hearing improves. I have heard many theories for it, and have heard it explained in a great many different ways. Physicians and otologists are very unwilling to admit that the hearing of deaf persons improves. They say, for instance, "there is a local tract in the brain which receives impressions from the ear, and in children of defective hearing that tract has lain dormant so long that it does not respond to impressions; and if you make an impression upon it, and continue to make that impression for some time, after awhile that tract in the brain will respond more easily than it did at first; but the child does not hear any better." They always put that last qualification in. It

seems to me that is simply another way of stating that the hearing does improve.

Take the tests made by the audiometer in the New York institution in December, showing a certain range of hearing, and then the tests made in the May following in the same children, and those who had received aural teaching from five to ten minutes each day there was an improvement in one ear or the other, and in most cases there was a very decided improvement, while in those with whom the audiometer had not been used there was no improvement. It will also be remarked that in the cases where the audiometer was only used in one ear that the improvement was confined to that ear. [Great applause.]

MR. GILLESPIE: We have another convert we would like to hear from—Miss Selby, of the Illinois institution.

MISS SELBY: When Dr. Gillett introduced me to my new class-room last year, he said, "We will begin this work as if we had all faith in it." I think I never undertook any work in which I had less faith than in that. Now I am convinced by the success of my labors. Dr. Gillett has given me every help that could be given, and all of the instruments that have been manufactured for the deaf have been purchased for me, and where they have not been made he has invented them. The instrument which has been the most help to me is the tube. I like the duplex tube. In using that I find that the pupil can give back to me my own words very much more readily and accurately than when I use the single tube. The inventive genius that Mr. Gillespie was sighing for has already been found. Dr. Gillett invented such an instrument in the first part of last year, and I use no other now. I can speak with that instrument to four pupils quite as easily as I could to one before.

I began with my class by giving them the full sounds, but I found after awhile that I could begin just as easily by giving them words, and now I usually begin with words. I have this instrument, which Dr. Gillett calls a "devil fish," which has one mouth-piece and four ear-pieces, and the sound of the words is heard by the pupils at once, who give it back to me. Each pupil gives the word back to me and then gives it to his classmate. And in this way, after their vocabulary is extended, we have some little conversation. I have thirty pupils in my class, one third of whom, with the use of the instruments and aids to the hearing, are placed on a plane with hearing children. I have no question about it at all. There are two pupils who began a short time before Christmas in my class, and who could then say "papa," "mamma," "cow." Now they can converse with any one in words of one or two syllables, and understand what you say and can reply.

MR. NOYES: Have you any pupils that are taught exclusively by the aural method?

MISS SELBY: No, sir. We have one hour a day in classes of four or six.

MR. NOYES [to Mr. Gillespie]: How many have you taught exclusively by the aural method?

MR. GILLESPIE: Twelve.

MR. F. D. CLARK: I have only taught two exclusively in that way; the others go to the class for an hour.

DR. GILLETT: Some of Miss Selby's pupils, when they go to their classes, are communicated with mostly by oral speech, and receive their communications from their teacher by hearing. I have in mind

a lady whom I had silver tubes made for, which fit within the external ear and penetrate the auditory meatus, and she is able to converse with great improvement in her speech.

MR. WESTON JENKINS: My observation in New Jersey with the pupils of the school of which I am the head has convinced me that there are a number of my pupils who are only hard of hearing, and that hardness of hearing, when congenital, unless aural methods are used, involves all of the consequences summed up under the head of deaf-muteism; in short, makes the subject a perfect deaf-mute. I will ask Dr. Peet how Miss Frankie Horton is getting on? That is the young lady who was under my instruction when I was working for Dr. Peet. She was a remarkably good articulator and lip reader, but the possession on her part of any degree of hearing which could be made useful was not suspected by herself or her teacher or any of her friends.

DR. PEET: That young lady's lip reading is so perfect that it is possible for any person to converse with her upon any subject. And since she has received special instruction in regard to hearing, there has been a little development of appreciation of vocal sounds. So that she can, very much more than formerly, comprehend what is said to her through the ear trumpet alone, even when she does not see the lips.

DR. GILLET: As we all know, the ear is a very complicated organ, a perfect instrument, so to speak. Musicians tell accurately when a piano is in perfect tune, by striking a particular note upon it, when the same note upon a violin or another piano will respond to it. Otologists tell us that in the top of the ear there are certain minute, almost innumerable papillæ. Certain of these papillæ respond to notes of a certain pitch, and do not respond to the notes of any other pitch; so that with one part of the ear we hear sounds that we designate as having a high pitch, and with another part of the ear we hear sounds that we designate as of a low pitch, and with others running through the scale intermediately. If those papillæ that respond to tones of a high pitch are paralyzed, which is sometimes the case, then the person, while he may hear the other tones very well, will hear nothing in that pitch. But if those are in a normal condition, and the papillæ which correspond to notes of a low pitch are paralyzed, then he hears no tones of a low pitch. So a person may hear some speech that is spoken in a particular pitch of voice, and nothing else; and he will never guess the reason of it. I think that is a subject that is very well worthy of our attention. I have in my mind two sisters, both of them semi-deaf. One will hear the telephone bell quite distinctly, and the other one will not. The other one will hear a pitch that is very low, which the first one does not hear at all. And yet there is one fact that is peculiar in reference to those two ladies, that in the street car they will hear better than anybody else, on all pitches.

MR. GILLESPIE: That same fact is spoken of by Miss Plum, in her experience in her class—that some of the children understand high tones and some low. And that is the philosophy of it.

MR. ELMENDORF: I will add one more word to Dr. Gillett's remarks. A little girl that I have been teaching for two or three years last past, I have discovered can hear certain sounds; but at just what pitch I never discovered until some time just before Christmas, when, as I was playing on the piano, and she was standing with her hand upon it, she said "I hear." I tried to find what she did hear; and I struck

the different notes until I struck B flat, which was the note she heard. I then took my tuning-fork, and found that that was the true sharp A on the concert pitch. I then took up a violin and tuned a string of the violin to that exact pitch, as near as I could judge, and she heard that. I had no other mechanical instrument. This simply showed that the peculiar construction of her ear was adjusted to that peculiar form of vibration, simply carrying out Dr. Gillett's idea.

MR. WESTON JENKINS: I would like to ask Mr. Wing if he will state the peculiarity of his own auditory apparatus?

MR. WING: I have found out that I can hear in the right ear only sharp sounds. On a piano I can hear the thud of the keys up to a certain point, and then it changes. With my left ear I can hear bell sounds only. Sleigh bells sound as if inclosed in a wooden box. I have discovered that there are some notes on the piano that I can hear very plainly, and others not at all. And there is a marked difference in the sounds of a piano heard by a trumpet and with a stick in my teeth. I presume that one fourth of the deaf and dumb can hear as well as I can. My hearing changes. Some days it is very clear and others very dull. Then again there are some days I can hear certain sounds, and perhaps the next day I cannot hear them. So that my hearing is not to be relied upon.

One thing more I would remark in connection with the use of my single tube. When persons hold it in a certain way the sounds are greatly confused. If held in another way the sound is very clear.

MR. MATHIESON: We had in our institution a girl who was sent to us from away back in the country, and she was certified to us as deaf and dumb. She was certainly a dull pupil, and she could not talk or hear. After she had been with us probably a month, very suddenly her hearing developed and she could hear as well as I could. I made this discovery by the application of a little soap and water. [Laughter.]

DR. E. M. GALLAUDET: I do not know that I have anything to add. I may say that while my own hearing is considered very good in regard to most sounds, that I am deaf to certain sounds. There are certain delicate metallic sounds that I fail to hear unless they are very near to my ear. By the ordinary tests of an aurist, or the ticking of a watch, I should be pronounced a pretty deaf man. But in all matters of speech and vocal sounds, my hearing is considered normal.

I may say that I am very heartily in favor of aural instruction of those who have some hearing. In Washington we have endeavored to do what we could, and the results have been highly satisfactory. We have quite a number of very interesting cases there. I think it is a branch of instruction which should be attended to for the deaf.

MR. HAMMOND: We have several cases in the Iowa institution that we have been teaching both orally and aurally, principally for the last year, and they have made a good deal of advancement. They were getting to use language quite well at the close of the term, whereas at the opening of the term, though they had some language and hearing, they were unable to utilize the hearing that they had.

MR. WALKER: We have a few in Kansas whom we are trying to teach to hear by the aural method. We find a difficulty though in getting teachers enough to supply the different departments. We can only send the pupils a short time three or four times a week to that teaching. I feel encouraged, however, and hope that we shall succeed.

I shall endeavor this year to do more in the work. I believe, as all do, that there are a great many who can be benefited by these tubes, and have their hearing developed sufficiently to aid them in gaining an education in the construction of English sentences.

MR. DENISON: I am in very much the same situation as Mr. Wing in hearing. I use an ear-piece; and would advise others who may follow my example in using one not to be discouraged if they find that sometimes they get no advantage from it. Last winter I found myself unable to hear with my ear-tube for two days; and I was very much depressed in consequence. But my little boy told me that he had dropped a marble into it. [Laughter.]

MR. WESTERVELT: I had my trumpet that I was testing the class with, and found that none of them could hear at all. Then I tested some pupils that had formerly heard fairly well with theirs; and, finding that they could not hear at all, I investigated the trumpet and I found that it was imperfect; that it was filled with japan. But we have been using our trumpets in our classes for the past year, and with some pupils for the past three years. We have a number of pupils who hear more or less perfectly; but none whom we teach altogether through hearing, however. But the hearing is made to help them in their articulation exercises. The teachers are each provided with more than one ear trumpet, so that the pupils can use a trumpet; and they are requested to use it when they are receiving special instruction in speech.

THE CHAIRMAN: The discussion of the subject of Advanced Language will be indefinitely postponed. The papers that have been prepared in connection with this subject will be published in connection with the proceedings of the Normal Department. We have a poem that has been prepared by Mrs. Isaac Louis Peet, with reference to our gathering here. Previous to its reading it is desired that Dr. Gillett come forward and occupy the chair.

President P. G. Gillett thereupon took the chair, amid great applause.

The following poem was then read by MR. WILKINSON, and interpreted by DR. PEET:

THE EAST AND THE WEST.

We take thy hand, O fair young West,
We clasp it close as here we stand;
Our old traditions of the East
Grow misty in this wondrous land.
And looking in the radiant eyes,
Our hearts beat high with glad surprise!

Tired Pilgrims over desert wastes,
'Neath burning suns we come to thee;
But as the mountain torrent hastes
Through lone, dark cañons to the sea,
So here with hurrying step we came,
To seek thine aid, behold thy fame.

The frowning Rockies, as we passed,
Bent o'er us their protecting hand;
The sad Sierras seemed to smile
Across on this thrice favored land,
To where, amid thy endless flowers,
Shall love and rest awhile be ours.

O golden land! O hearts of gold!
How often in our dreams
We saw thy mountains, pressed thy hand,
And walked beside thy streams;
But dreams are dim and visions naught,
Beside the glory thou hast wrought.

We brought to thee of all our best;
 Thou gavest unto us thine own;
 And interchange of thought and hope
 Have given a clearer, deeper tone
 To Duty's voice, to Toil's command;
 And firmer, surer we stand.

We stand together, West and East,
 One hope, one work, one aim.
 And bright for us, or far or near,
 Shall burn the tender flame
 Of memories of this union sweet,
 To make our labor more complete.

Then once again with fond regret
 We clasp in ours thy hand,
 And look farewell with misty eyes
 O'er this enchanted land,
 To where thy mountains grand in state
 Keep guard around thy Golden Gate.

[Great applause.]

President Gillett was here presented with a silver set, with the following address, which was received with long continued applause:

REMARKS BY GEORGE E. SKINNER.

Doctor Gillett: I have the pleasure, sir, as one of the committee appointed by the delegates to this convention en route from the East, to express to you their appreciation of your services in making the journey to this place so comfortable and delightful.

Your arduous labors extended to every State in the Union and Canada. The anxiety and requisite toil experienced by you without remuneration or complaint, has placed us under great and lasting obligations.

As the result of your efforts, I venture the assertion that no excursion has ever crossed the continent better equipped and with greater pleasure and satisfaction. And allow me to remark that a more intelligent, faithful, and worthy company of instructors cannot assemble at any point, east or west, than those you so successfully brought to this beautiful spot in the Golden West.

Your efforts have been the means of calling together a much larger number than would otherwise have participated in the pleasant and instructive exercises of this convention, and will cement more closely that bond of sympathy for the work in which Superintendent and teachers are engaged, and by comparison of views resulting from your experience, all will return to their respective homes with a greater desire to perform more efficiently, if possible, that glorious work of ameliorating the condition of the deaf and dumb of our country.

We ask you, doctor, to accept from your friends this case of silver as a slight expression of our appreciation of your effort in our behalf, with the desire that you may long be spared to continue in the glorious work to which your life has been consecrated. In your declining years, when relieved from active duties, and memory shall recall the many pleasant incidents of a long and useful life, may this occasion be one on which you may dwell with as delightful emotions as are enjoyed by those who are permitted at this time to express their gratitude to you.

DR. GILLETT: My friends, I confess I do not know what to say. The field is a large one, but I do not feel that I am competent to respond without some opportunity of reflection. I was appealed to

once by some friends and neighbors, who called to see me to know if I could not do something to get one Creed Larch out of the penitentiary; and the reason assigned was that his family were a very troublesome family in the community, and they thought if they could get Creed home and out of the penitentiary, that perhaps he might take care of his troublesome children. I did what I could. The matter went to the Governor, and it was not long afterwards when I met Creed coming down the street, and he said, "Doctor, I am very much glad to see you; you got me out, and I will return the compliment one of these days." [Laughter.] I hope that some time I may be able to return the compliment, for I assure you, my friends, that I have no sense of deserving any such recognition of my humble services in your behalf. I did only what I was appointed to do, and others did what they were appointed to do.

I may take occasion here to say that the assembling of such a body of men and women as this is one of the notable events, not only in our lifetime, but in our generation. There has never been a time in the history of the world when a similar body could have been brought together. Take the character of this body that is represented here this evening—the most powerful exponent of the enlightened Christian sentiment and fellowship of this age that can be found anywhere.

Has it occurred to you, as Dr. Gallaudet remarked to me on yesterday, that the education of the deaf was the first enterprise for the care of the afflicted and unfortunate? It was first begun by our forefathers in the early part of this century as a benevolent enterprise. The old American Asylum at Hartford is the mother, not only of all of the deaf-mute institutions of this land, but it is the mother of all insane hospitals, all of the institutions for the blind, of all institutions for the feeble-minded, of all the reformed schools, and of nearly all those institutions, educational and charitable, that now characterize this age of ours. [Applause.]

I have no hesitation in saying that nowhere else on all this globe can such a powerful and forcible exponent of the Christian and enlightened sentiment of this age be found as are brought together here this evening.

Then I consider this gathering in another aspect. I was talking with a gentleman last night who told me that he crossed that terrible desert coming to this country, when he could have gone from one side of it to the other, stepping from the dead body of one animal to another all the way across. He had known what it was to traverse the desert on foot making his way during the nights to escape the savages. And he is still a young man. We came here in elegant palace cars. We came here with the best comforts of a home that this world affords. We came not merely in days; but we could count it in hours. Put this alongside of that, and who says he is not proud to say that he is an American citizen, and that he lives in this nineteenth century? My friends, it is not for us to enjoy alone; it is also for us to achieve. We know not what the vast opportunities are that are lying before us, and what achievements may yet be awaiting us, and how wisely and well we may lay the foundations for those who follow us to build upon. God forbid that we should fritter away our lives; that it shall be said in the future of us that we would never have been where we are but for our fathers years before. May we act well the part that God has intrusted to us; and may we ever be found faithful to all the trusts that our fellow men repose in us.

I thank you sincerely for these marks of your confidence and favor. You have been a thousand times kinder to me than I have deserved. I have never had a greater pleasure in all my life, my friends, than in trying to do as best I might what would contribute to your pleasure and happiness, in making this journey. And may God grant that our journey through life, as we travel over the deserts of life, as we cross the mountains, as we pass by the rivers, and as we go over the plains, and as we are finally landed in the Paradise beyond, may God grant that our lives may be peaceable, pleasant, and happy. [Great applause.]

HON. ERASTUS BROOKS: Mr. President, ladies and gentlemen, I think to add words to those we have heard to-night, and aforetime at this convention, would be almost like gilding refined gold, or seeking to add perfume to the violet. I have been deeply impressed with this convention. I have attended a great many assemblies in my life, and for attention to business, and for instruction in every department which belongs to the several institutions of which we are members, for fidelity to the cause and causes which have brought us together, and for great respect for the past which has led us to the present, and which gives prospect of a brighter future than the present or the past can afford, it seems to me, as my friend has intimated, that there has been no parallel to this assembly in the conventions of the country. The great order which has been observed, the respect and the fidelity for the interests which we represent, the peace and good will which has animated every heart and has been diffused to all around us, it seems to me make it a memorable event in our own personal lives, in the associations which we have formed for the present, and in the memories which can never fade away.

It will not be my privilege to be present at the close of this convention to-morrow night. I shall therefore ask the privilege of expressing what I sincerely feel, the warmest gratitude, not only to our friend, your presiding officer, who has led us thus far in safety and in comfort, but to our near and dear friends, whose home we have visited, and who has extended to us such a warm and cordial welcome. [Great applause.]

Speaking for myself—and I am sure I speak the common sentiment of you all—the visit we have made is to us a new revelation of our country which God seems to have blessed and favored above all the nations of the earth, in that unity of spirit, which, more through education than from any other cause, binds the brains and the hearts of men in a closeness and unity of feeling, and which no power on earth can possibly separate in the future.

“Count that day lost, whose low descending sun
Sees at thy hand no worthy action done.”

In that spirit, I say, we may take each other's hands, and feel bound closer and closer together, each heart in thankfulness to God for the privileges we have been permitted to enjoy during the past week, and during our journey to this very distant place from our respective homes.

I am especially thankful that I have come to see, eye to eye, and face to face, this Golden Gate of the Pacific—the dreamland of my imagination—of which I have heard and read, and now, in common with all of you, enjoy. And as I looked out upon it yesterday, in the clear sunlight, with the clouds resting upon the sides of the hills, and

the sun of heaven resting upon their tops, I was led to feel and exclaim in regard to the educational institutions of the country, and especially in regard to its commerce:

" Bid harbors open, and public ways extend;
Bid temples worthy of the gods ascend."

We have seen this, and we have enjoyed it in presence. I think I understand, Mr. Chairman, as never before in the history of my own life, and in the history of the country at large, what the poet said when he put that important question:

" What constitutes a State?
Not high-raised battlement, or labored mound,
Thick wall, or moated gate;
Not cities proud, with spires and turrets crowned;
Not bays, and broad, armed ports,
Where, laughing at the storm, rich navies ride;
Not starred and spangled courts,
Where low-browed baseness wafts perfume to pride.
No:—men, high-minded men,
With powers as far above dull brutes imbued,
In forest, brake, or den,
As beasts excel cold rocks and brambles rude;
Men who their duties know,
But know their rights, and knowing dare maintain."

And for this revelation of what nature is in the grand mountains and rivers which we have passed; this revelation of our common motherhood, in the sympathies felt one for another, and for our dear friends who have given us of their hearts and their homes, I am sure we feel a thankfulness which will continue in our memories to the latest day of our lives. [Applause.]

THE CHAIRMAN here announced that the colored waiters would give a musical entertainment, after which the convention adjourned until the following day, at seven o'clock P. M.

THURSDAY, JULY 22, 1886.

EVENING SESSION.

MR. THEODORE LORD delivered to the convention a lecture on the Samoan Islands, after which the convention proceeded as follows:

THE CHAIRMAN (DR. GILLET): Ladies and gentlemen, members of the convention, we have arrived, all too soon, at that time that we have all been looking forward to with dread. It seems almost impossible that already a week and a little more has passed by since we arrived at this most beautiful and most hospitable place; which has been to us indeed a home; where we have felt the freedom of home, where we have taken the liberties of home, and where we have had the comforts of home. But we cannot tarry longer. Duty calls us to other fields of labor.

This convention has been indeed a very green and a very bright spot in the professional history, and in the life of every one of us. Here old attachments have been strengthened; here new acquaintances have been formed; here friendships have been contracted that

neither time nor eternity will efface. And we shall, all of us, as long as we live, look back upon it with feelings of the most intense satisfaction and pleasure, and with the feeling that it has been a high honor to have been a member of this convention; to have met the people of this lovely town, and of this enterprising community; and to have enjoyed the hospitality of the Superintendent of this institution and his lady, and of his assistants, and of the Trustees of the State; and to have received, as we did, the welcome of his Excellency the Governor, the Chief Executive of the great State of California. We would gladly tarry longer; but we cannot. We shall not all be assembled again; and it will be with feelings of no slight degree of sadness that we shall to-night take the hand of each other to say good-bye, knowing that that is only the feeble symbol of the fact that we shall all meet in the great morning beyond.

There are duties that devolve upon us upon this closing occasion, and I will not occupy your time further, but will give way for the business that properly comes before us at this time. [Applause.]

Prof. J. L. Noyes, Mr. Mathieson, Mr. Dudley, Mr. Gillespie, Mr. Walker, Mr. Clark, Mr. Argo, Mr. Crouter, and others then read the following resolutions:

By MR. NOYES:

Resolved, That the grateful thanks of this convention be extended to the following named railroad companies that have combined to make most pleasant, profitable, and memorable the long journey over hill and dale, over dust and fruitful field, necessary to reach the Pacific Coast and be conveyed back to our respective homes, viz.: Chicago and Alton Railroad; Union Pacific Railroad; Denver and Rio Grande Railroad; Central Pacific Railroad; Southern Pacific Railroad; Oregon Railroad and Navigation Company; Northern Pacific Railroad; Chicago and Northwestern Railroad; Chicago, Milwaukee, and St. Paul Railroad; Wisconsin Central Railroad; Chicago, Minneapolis, and St. Paul Railroad; Chicago, Burlington, and Quincy, and Chicago and Rock Island Railroad; Illinois Central Railroad; Louisville and Nashville Railroad; Baltimore and Ohio Railroad; Pennsylvania Central Railroad; Boston and Albany Railroad; Grand Trunk Railroad of Canada; Chicago and Grand Trunk Railroad; Michigan Central Railroad; Lake Shore and Michigan Southern Railroad; New York Central Railroad; Cincinnati, Indianapolis, and St. Louis Railroad; Queen and Crescent Railroad; East Tennessee, Virginia, and Georgia Railroad; Missouri Pacific Railroad.

By MR. MATHIESON:

Resolved, That the grateful thanks of this convention are hereby expressed to the following associations, viz.: The Transcontinental Railroad Association, the Missouri River Railroad Association, the Michigan Railroad Association, the Trunk Line Association, the Central Passenger Commission, the Southern Passenger Commission, for the liberal concessions made to us through the Chairman of our Transportation Committee, rendering possible a large attendance upon the Pacific Coast convention.

By MR. DUDLEY:

Resolved, That the thanks of this convention be extended to the Pullman Palace Car Company for the elegant service rendered its members, and especially for the use of their coaches during our two days' stay at Jacksonville, Illinois, and four days' stay at Colorado Springs, and for the pleasing and courteous attention so cheerfully bestowed by officials en route.

By MR. WALKER:

Resolved, That this convention holds pleasant memories of their short stay at Colorado Springs, as guests of the Colorado Institution for the Education of the Deaf and Dumb, and of the grand and magnificent scenery its members were permitted to enjoy for a season.

Resolved, further, That this convention hereby extend their most cordial thanks for the kind hospitalities extended them by Superintendent D. C. Dudley and wife, and the honorable Board of Trustees of the Colorado institution.

By Mr. J. A. GILLESPIE:

Resolved, That the thanks of this convention are hereby tendered to Mr. H. C. Hammond, Secretary of the convention, and to his assistants, for a full and accurate record of our proceedings.

By Mr. F. D. CLARK:

Resolved, That the thanks of the convention are extended to the proprietors of the hotels in Chicago, Colorado Springs, and Salt Lake, and to the eating houses en route for hospitalities and concessions made to the members.

By Mr. ARGO:

Resolved, That the thanks of the convention be tendered to the representatives of the San Francisco and Oakland press for the full and interesting daily reports of our proceedings, and also to Mr. E. S. Belden for the careful stenographic report of the entire proceedings of the convention.

By Mr. W. O. CONNER, of Georgia:

Feeling that the gentleman who was called upon to preside over the deliberations of this convention, has conferred honor upon it, by the able, impartial, and affable manner in which he, with his assistants, dispatched its business, and that we should not let the occasion pass without a full and hearty expression of our appreciation of the services rendered; therefore,

Resolved, That the thanks of the convention be tendered to its able President and his assistants, for the satisfactory manner in which they have intelligently and impartially discharged their duties.

By Mr. CROUTER:

Resolved, That the thanks of this convention be extended to Mr. Charles W. Ely, of Maryland, and the Executive Committee of the convention, for inaugurating and conducting to a most successful end the Normal Department of the convention; and

Resolved, further, That this department be continued at future conventions, in such manner as the wisdom of the Executive Committee may suggest.

By Mr. HOTCHKISS:

Resolved, That the thanks of this convention be hereby tendered to the Board of Directors of the Illinois Institution for the Deaf and Dumb, for their generous hospitality in entertaining the members of the convention during July third and fourth, and to the Superintendent, Mr. Philip G. Gillett, and to Mrs. Gillett, and Mr. Charles P. Gillett, and their assistants, by whom that hospitality was dispensed, for their successful endeavors to make the visit one of the pleasantest episodes of the whole meeting.

The following resolution was adopted by the deaf delegates to the Eleventh Convention of American Instructors of the Deaf:

WHEREAS, The several Superintendents and teachers have so kindly volunteered their services as interpreters in behalf of the deaf portion of the convention, during its long and interesting session; be it

Resolved, That our heartfelt thanks be tendered them, one and all.

DOUGLAS TILDEN,
JNO. B. HOTCHKISS,
GEO. WING,
JULIA A. FOLEY,
DOSIA A. GRIMMETT,
Committee.

DR. E. M. GALLAUDET: I have been requested by my brother, the Rev. Dr. Thomas Gallaudet, of New York, who has been prevented by circumstances beyond his control from being present this evening, to express on behalf of himself and his fellow laborers in the New

York Institution for Deaf Mutes their great appreciation for hospitality and courtesy which has been extended to them by the officers of this institution, and by the officers and members of the convention in which they have been permitted to join as members.

My brother begged me to assure the convention that his absence was occasioned by circumstances beyond his control, and that he would have taken especial pleasure in presenting this assurance of his regard and appreciation.

I beg leave also to present a preliminary resolution, which I will read. But I may premise, Mr. President, by saying, that though they necessarily for the purposes of the record assume a certain formal garb, yet I am sure that they represent feelings existing in all our hearts which will overstep and go beyond the bounds of mere formal expression:

WHEREAS, Through the unbounded hospitality of the Board of Directors of the California Institution for the Deaf and Dumb and the Blind, and the foresight, energy, able management, unfailing courtesy, and cheerfulness of the officers intrusted with its dispensation, the Eleventh Convention of the Instructors of the Deaf to-day closes its sessions with the consciousness that this has been in every way the most profitable and the pleasantest of all these gatherings; therefore, be it

Resolved, That the thanks of the members of this convention, individually and collectively, and, through them, of that vast body who will profit by the many lessons learned here, are due and are hereby tendered to the Board of Directors of this institution, to its Principal, Mr. Warring Wilkinson, and his charming wife and daughter, and to each of the corps of instructors and officers of the institution, whose kindly grace and hearty courtesies have made the sojourn here a dwelling among friends.

[Great applause.]

DR. E. M. GALLAUDET: I have no desire to make a lengthy speech, for in connection with such resolutions as these perhaps silence will be golden. But I wish to say, Mr. President, that I have a long, long speech to make in support of these resolutions. I do not intend to make it here, but I intend to make it as I go forward, living the days, months, and years that are allotted to me on this footstool. And the speech that I shall make, telling of the hospitality, the unbounded hospitality and cordial welcome that we have received here at this institution, will go on, and on, and on, and be told to my children and to my grandchildren, and to my friends everywhere, all over the world, as long as I live. [Great applause.] And in that speech I am sure you will all join me, so that the speech which sustains these resolutions shall end only with our expiring breath upon this earth.

The resolutions were then unanimously adopted, amid great applause.

MR. WILKINSON [great applause]: It is simply impossible, my good friends, to say what is in my heart to say. The kindly words which have just been uttered in your hearing and in our presence, deserve a good deal more than I can say. This gathering has been to me the dream, the expectation, and the hope of many years. I have for twenty years, during all my life in California, hoped I should be able to entertain our friends upon this western shore. Ten or eleven years ago, when we seemed to be in something of a condition to make that hope a realization, it went up in flames, and I had to begin again the work of reconstruction, and to defer the gathering which we have so happily witnessed during the past week. Two years ago, as a good many of you remember, I was grievously disappointed; as I had hoped, in connection with our good friends here, to have induced the confer-

ence of Principals then to come and meet with us in California. But it seemed best, for reasons which you know, that they should not come. And now I am glad that they did not. [Applause.]

It is one of those cases of which I have had quite a number of experiences, during my life, where the thing that I wanted was denied me in order to give me a better. [Applause.] So the loss of two years ago has resulted in this glorious gathering which we have been having for the last week.

I cannot tell you how much joy this thing has brought to me. It would be foolish for me to say it has not been a great deal of work. It has been. But it has more than paid for itself; it has more than paid for all the labor that it has put upon me, or that it has put upon my assistants. It has brought many old friends here, friends of my youth; friends of the beginning of my labors in this profession. It has brought many of the younger ones in the profession, whom it has given me an opportunity of seeing face to face, and whose earnestness and intelligent part in this convention give such abundant promise for the future. The value of meetings like this is not all found in the papers read, or the discussions engaged in. There is a kinship born of this friendly communion that leads to larger love, not only of each other, but of the work in which we are engaged. I never was so proud of my profession as now; I never loved its members as much as to-night.

I wish also to tell you how much all my associates have enjoyed this meeting. I want you to understand how earnestly and how enthusiastically my Board of Directors have coöperated with me in all of the arrangements that have been made for your comfort and convenience. We have not been able to do for you what could have been done by my friend here, Dr. Gillett, a man with five hundred beds at his disposal; but whatever shortcomings you may have discovered, or whatever inconvenience you may have suffered [voices—"There are none"], you may be sure that they have been those only which inexperience could not foresee, and those due simply to the inadequate resources which we have. We have desired to make you comfortable; if we have succeeded I think it is largely due to your patient forbearance. [Great applause.]

It was a sad suggestion that our Chairman made at the close of his remarks. There is little probability that so large a number of the same individuals will ever assemble again this side the Dark River; but it is a comfort to feel that we shall not meet as strangers in the Great Convention on the farther shore, but that the memory of these pleasant days shall abide with us here and there. And now, till we clasp hands by the crystal sea, I bid you God speed, and farewell. [Applause.]

Resolutions of thanks to Dr. Gillett and to Mr. Lord were then adopted unanimously.

By GEO. L. WEED:

Resolved, That the members of this convention hereby express their sense of obligation to Dr. P. G. Gillett for his labors in securing special facilities for their transportation hither, thus contributing largely to the success of the convention; making practicable what otherwise would have been difficult for many, and securing the welfare of all.

By MR. MOSES:

Resolved, That the thanks of this convention be tendered to Mr. T. A. Lord for his interesting lecture on the Samoan Islands.

MR. CHICKERING, of Washington: In order that immortality may be given to our proceedings and our pleasant memories of all that has been said and done from day to day, I introduce the following resolution:

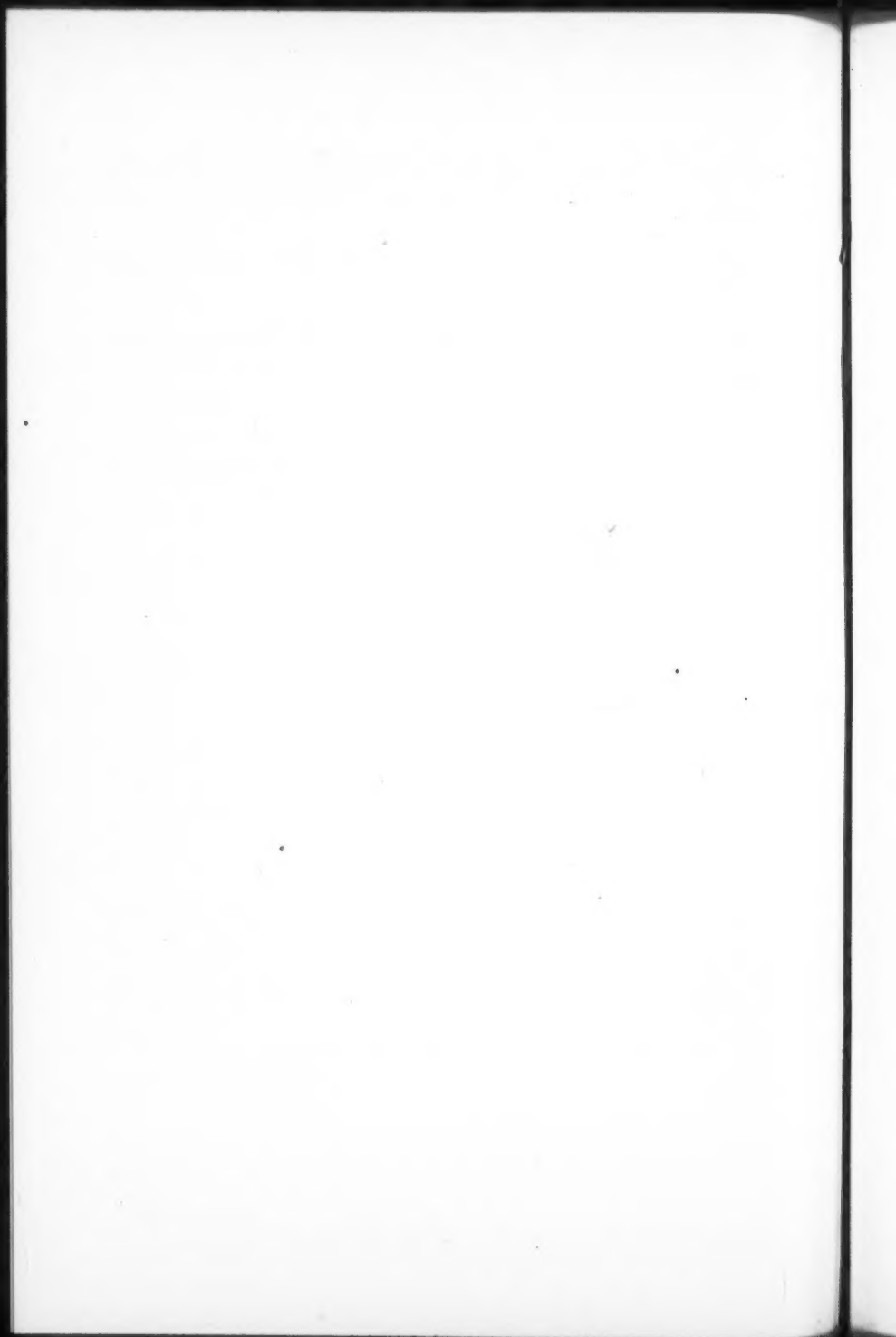
Resolved, That Professor Warring Wilkinson and Mr. T. d'Estrella be appointed a committee, to whom shall be intrusted the minutes and papers of this convention, for publication and distribution.

This motion on being put was carried unanimously.

On motion of Dr. E. M. Gallaudet, the time and place of the next meeting was left to the standing Executive Committee, with power to determine.

Prayer was then offered by Rev. Dr. Easton, of St. Mark's Church, Berkeley.

THE CHAIRMAN: With great regret I declare the Eleventh Convention of American Instructors of the Deaf and Dumb adjourned sine die.



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